Order No: MD0201021C2

Service Manual

Portable Stereo CD System

COMPACT disc DIGITAL AUDIO

RX-ES22E / RX-ES22EB / RX-ES22EG

Colour

(S).....Silver Type

Tape Deck: SG2 Mechanism Series

Traverse deck: RAE0155Z-1V Mechanism Series

SPECIFICATIONS

■ RADIO

Frequency range	
AM	**522-1629 kHz (9 kHz steps)**
FM	**87.5-108 MHz (50 kHz steps)**

■ TAPE RECORDER

Track System	**4 track, 2 channel, stereo**
Recording system	**AC bias**
Erasing system	**Multi Pole magnet**
Monitor system	**Variable sound monitor**
Frequency range	
Normal position	**50-14000 Hz**

■ CD PLAYER

Sampling frequency	**44.1 kHz**
Decoding	**16 bit linear**
Beam source	**Semiconductor laser (wavelength 780 nm)**
No. of channels	**2 channel, stereo**
Wow and flutter	**Below measurable limit**
D/A converter	**MASH (1 bit DAC)**

■ GENERAL

Power requirement	
AC	**230-240 V, 50 Hz**
Power consumption	**23 W**
Battery	**12 V [Eight R20/LR20 (D, UM-1) batteries]**
	● Do not use rechargeable type batteries
Memory backup for computer/ clock	**6 V [Four R6/LR6 (AA, UM-3) batteries]**
	● Do not use rechargeable type batteries
Speakers	**8 cm 2.7 Ω x 2**
Jacks	
Output	**Phones: 3.5 mm stereo (16-32 Ω)**
Dimensions (W x H x D)	**529 x 144 x 276 mm**
Mass	**4.0 kg without batteries**

Notes:

1. **Mass and dimensions shown are approximate.**
2. **Specifications are subject to change without notice.**

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C301 through a 10 Ω, 5 W resistor to ground. DO NOT SHORT-CIRCUIT DIRECTLY (with a screw driver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent. Current consumption at AC 220 V, 240 V, 60 Hz in NO SIGNAL mode should be ~100 mA respectively.

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. Turn off the power.

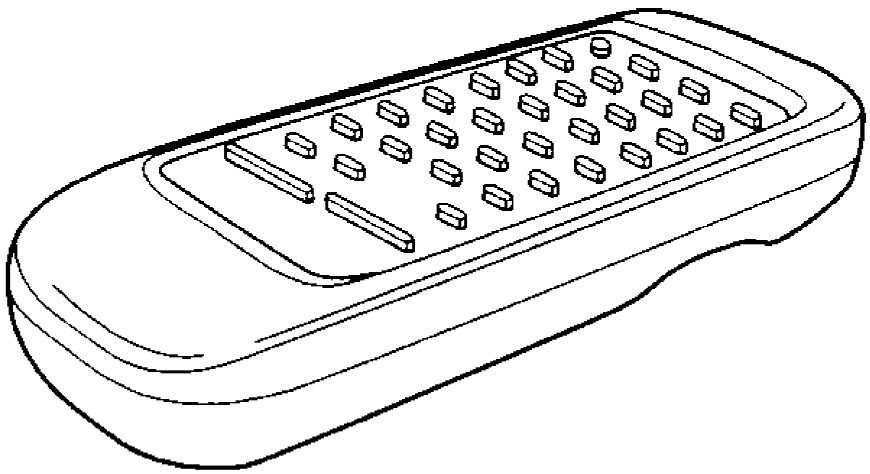
2. Determine the cause of the problem and correct it.

3. Turn on the power once again after one minute.

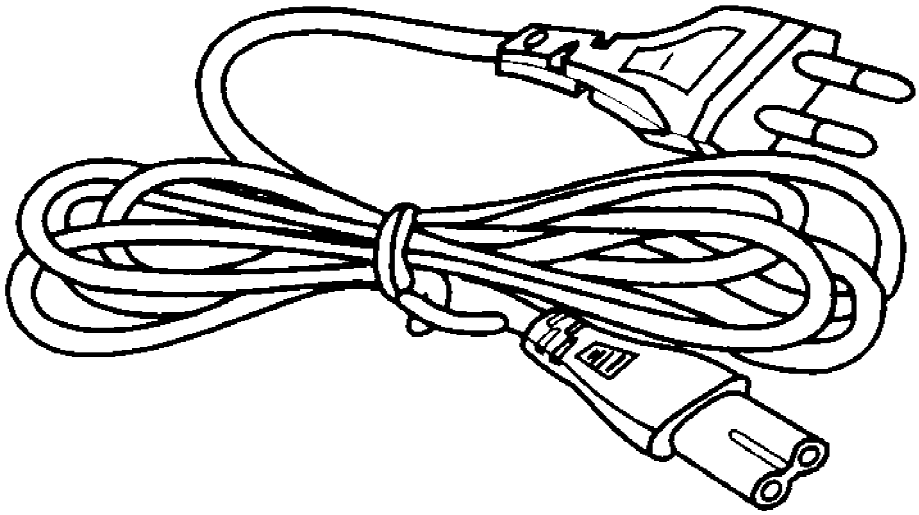
Note:
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

3. Accessories

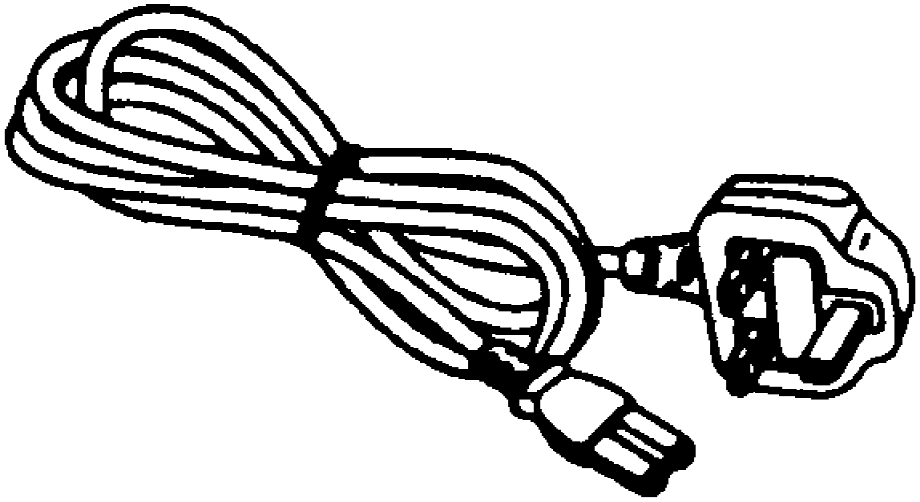
Remote Control Transmitter.....1 pc



AC Mains Lead (E/EG).....1 pc



AC Mains Lead (EB).....1 pc



4. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body. So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

- Handling of traverse deck (optical pickup)

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FFC board).**
3. **Take care not to apply excessive stress to the flexible board (FFC board). When removing or connecting the short pin, finish the job**

in as short time as possible.

4. **Do not turn the variable resistor (laser power adjustment). It has already been adjusted.**

- Grounding for electrostatic breakdown prevention

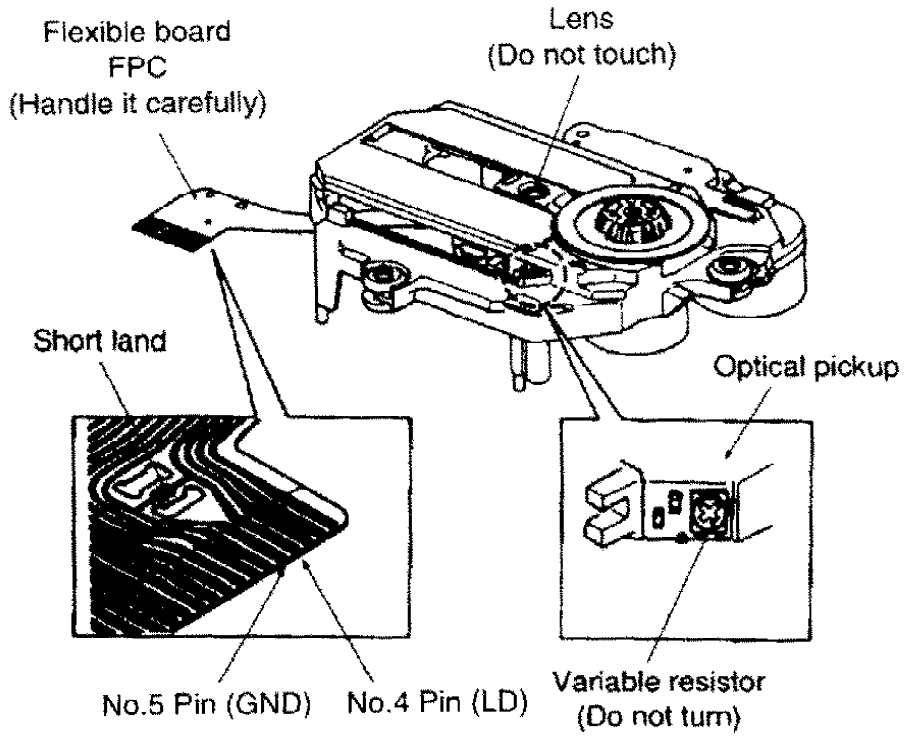
1. **Human body grounding**
   Use the anti-static wrist strap to discharge the static electricity from your body.
2. **Work table grounding.**
   Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is place, and ground the sheet.

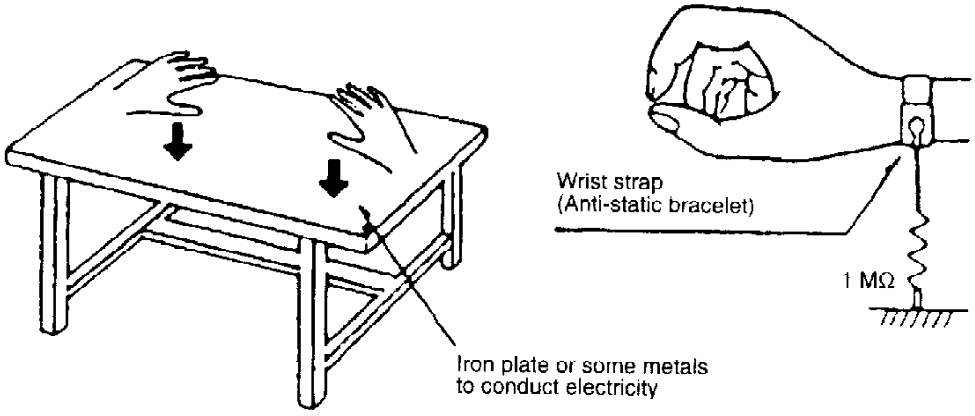
Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup). /

Caution when replacing the Traverse Deck

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.





5. Precaution of Laser Diode

Caution:

This product utilizers a class 1 laser. Invisible laser radiation is emitted from the optical pick up lens.
When the unit is turned on:

1. **Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pick up unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pick up lens for a long time.**

ACHTUNG:

Dieses Produkt enthält eine Laserdiode. Im enigeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt. / Wellenlänge : 780nm / Maximale Strahlungsleistung der Lasereinheit : 100 μ W/VDE / Die Strahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. **Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.**
2. **Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.**
3. **Nicht mit optischen Instrumenten in die Fokussierlinse blicken.**

4. Nicht über längere Zeit in die Fokussierlinse blicken.

ADVARSEL: I dette a apparat anvendes laser.

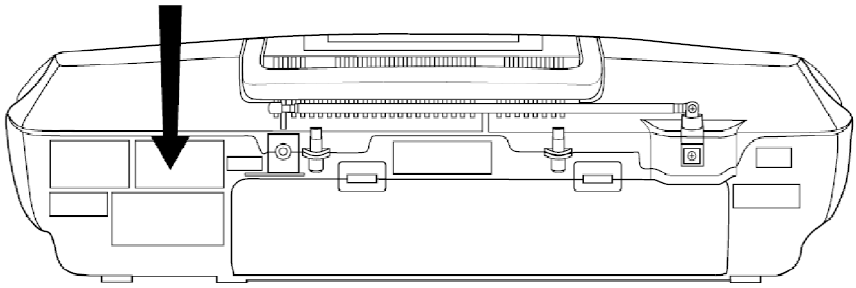
CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ **Use of Caution Labels**

(Back of product)

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT



DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

Inside of product
Tuotteen sisällä
Produktets innside

6. Caution for AC Mains Lead

(For "EB" area code model only.)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OFF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Blue:	Neutral
Brown:	Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

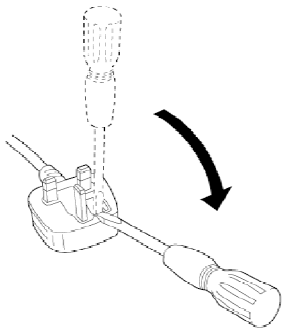
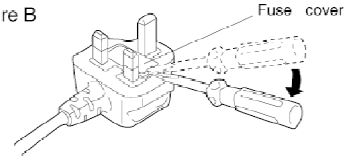


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

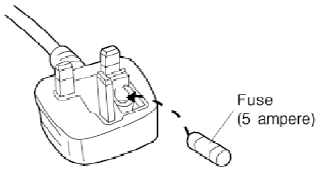
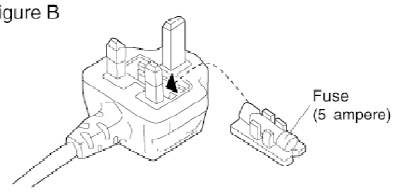
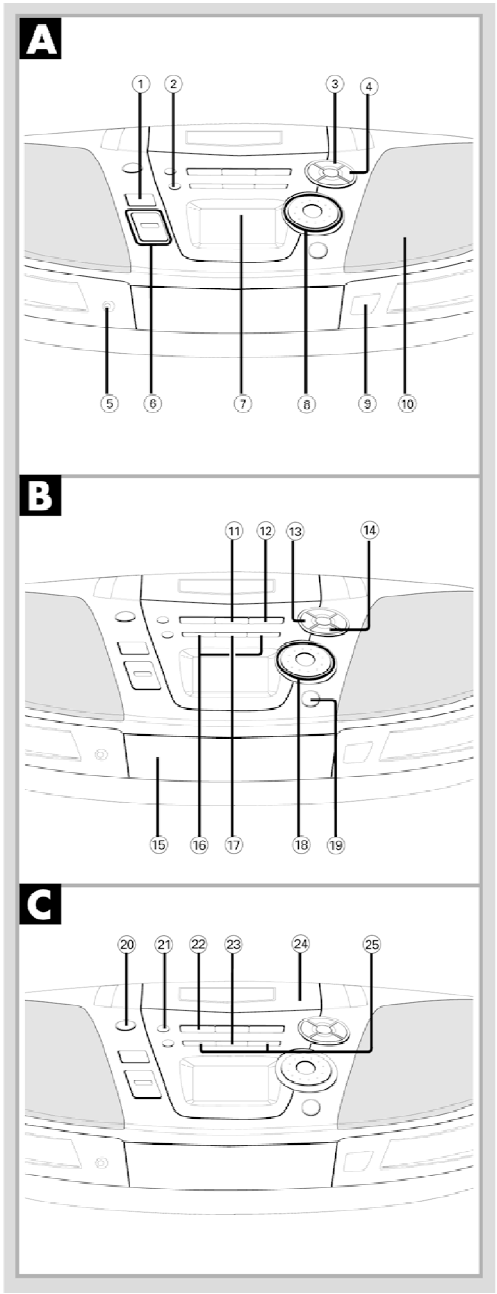


Figure B



7. Location of Controls



A Basic controls

Number	Designation
①	**Standby/on switch (⏻/I)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
②	**Preset equalizer button (PRESET EQ)**
③	**Play timer/record timer button (⏲ PLAY/REC)**
④	**Clock/timer button (CLOCK/TIMER)**
⑤	**Standby/on indicator (⏻/I)** The indicator lights green when the unit is turned on. When the AC power supply is used, it functions as an AC connection indicator. (The indicator colour changes to red when the unit is turned off.)
⑥	**Volume control buttons (+, – VOLUME)**
⑦	**Display panel**
⑧	**Time adjust dial (TIME/PRESET TUNE ⁻ CD SKIP ⁻)**
⑨	**Remote control signal sensor (SENSOR)**
⑩	**Speaker**

Note
These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.

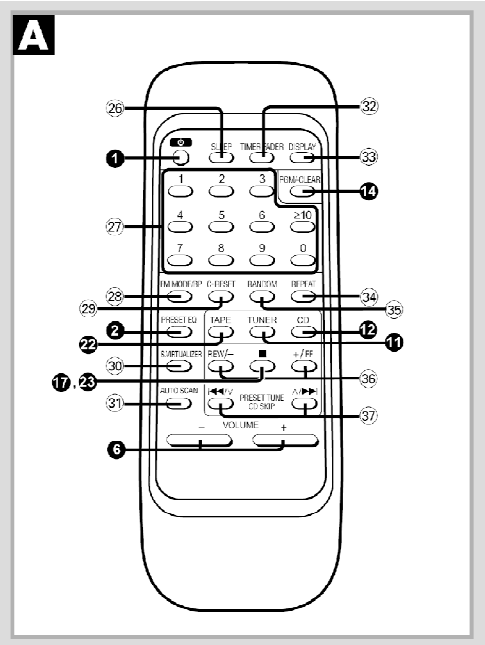
B Tuner/CD controls

Number	Designation
⑪	**Band button (TUNER BAND)**
⑫	**CD play/pause button (▶/II CD)**
⑬	**CD recording mode button (CD REC MODE)**
⑭	**CD program/clear, tuner preset button (•MEMORY ▪CLEAR)**
⑮	**CD tray**
⑯	**Tuning/CD search buttons (REW / – / ◀◀, ▶▶ / + / FF)**
⑰	**CD mode select/stop button (■ TAPE/CD)**
⑱	**Preset channel select/CD track select dial (TIME/PRESET TUNE ⁻ CD SKIP ⁻)**
⑲	**CD tray open/close button (⏏ CD)**

C Cassette deck controls

Number	Designation
⑳	**Deck eject button (⏏ DECK)**
㉑	**Record/record pause button (●/II)**
㉒	**Cassette play button (▶ TAPE)**
㉓	**Tape mode select/stop button (■ TAPE/CD)**
㉔	**Deck**
㉕	**Rewind/fast-forward buttons (REW / – / ◀◀, ▶▶ / + / FF)**

8. The Remote Control



A Buttons

Number	Designation
㉖	Sleep timer button (SLEEP)
㉗	Numbered buttons
㉘	FM mode/BP button (FM MODE/BP)
㉙	Tape counter reset button (C-RESET)
㉚	Sound virtualizer button (S.VIRTUALIZER)
㉛	Auto scan button (AUTO SCAN)
㉜	Timer fader button (TIMER FADER)
㉝	Display select button (DISPLAY)
㉞	Repeat button (REPEAT)
㉟	Random play button (RANDOM)
㊱	Tuning/rewind/fast-forward buttons (REW/–, +/FF)
㊲	Preset tuning/preset scan/CD skip/search buttons (I◄◄ / ∨, ∧ / ►►I)

When the unit is supplied with AC power, buttons ❶, ❷, ❻, ⓫, ⓬, ⓮, ⓱, ㉒ and ㉓ function in the same way as the controls on the main unit. To save power, the unit cannot be turned on from the remote control when batteries are used.

9. Self Diagnostic Function

9.1. Setting of self-diagnosis Function

9.1.1. Setting of CD self-diagnosis mode /

1. Remove the cassette from the deck.
2. Switch to CD function.
3. Press the CD/TAPE STOP key of the main set for more than 2 seconds. While pressing this key, press the FF key on the main set for another 2 seconds to enter into the Self-Diagnosis mode. *Even if STOP / FUNCTION key of the main set is pressed while the Self Diagnosis mode is on, function shall not be switched. Instead, confirmation of error numbers shall begin. /

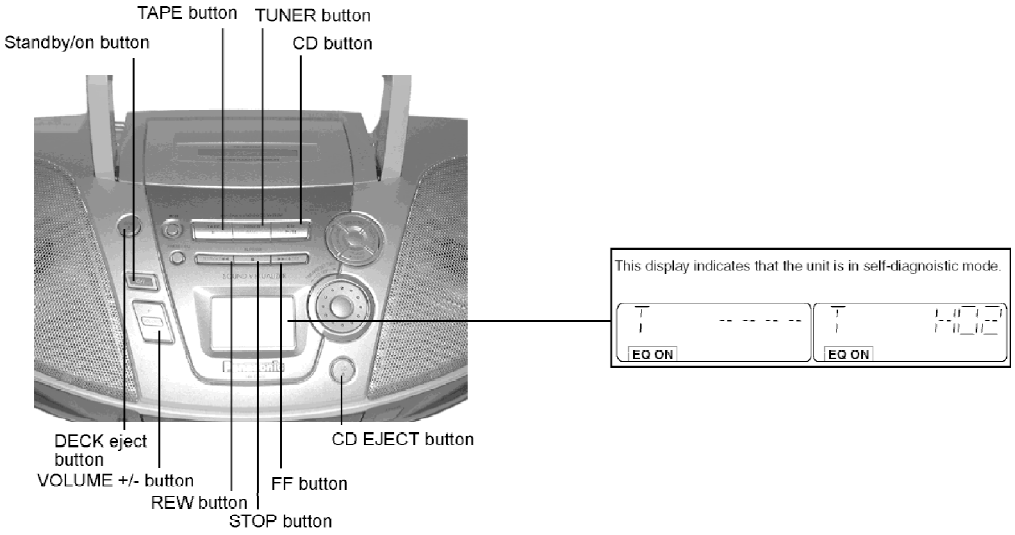
9.1.2. Setting of cassette mechanism self-diagnosis mode /

1. Activate the Self Diagnosis mode with the Deck unloaded.
2. The test mode display ([T] at the 1st digit shows TEST) shall be made and detection shall be executed to check RECINH SW, HALFSW are in OFF state.
   (the tape counter display is retained)
3. Load a cassette tape (with recording preventive tab present) into a deck and close the cassette holder.
4. At this instant with the cassette loaded in RECINH SW, HALF SW

shall be checked and confirmed at this stage by the software. Press FF key to proceed the self-diagnosis. The FF operation shall stop automatically after 3 sec. If abnormal operation is detected, the tape shall stop automatically after 1 sec. During the FF operation, the Reel Pulse shall be checked by the software.

5. **After the tape stop, the Error codes shall be displayed by toggling the STOP key.**

9.2. Display Location



9.3. Display Content

Note:
Items marked with ( ) are automatically displayed, and do not required the procedure describe in the section “Self-Diagnosis Function”.

Display Code	Symtom or condition	Cause and method of correcti
*U01	When operating on batteries, power goes off immediately after being turned on.	The batteries are depleted. Replace wit batteries.
*U02	Power cannot be switch on.	The power cord (AC) or insert fresh ba
H01	Cassette deck does not operate correctly.	Faulty cassette deck mechanism mode detection switch (DECK 1: S951, DECK reel motor and plunger.(Check and rep
H02	Units does not record, or the unit goes into recording mode even when the erasure prevention tabs have been removed from the cassette.	Faulty erasure-prevention tab detectio (S974, S975) or short circuit.(Check an
H03	Tape does not display, even when the tape deck play button is pressed.The motor operates when the tape deck play button is pressed, even when no cassette is loaded in the deck.	Faulty tape detection switch (DECK 1:S DECK 2: S972) or short-circuit.(Check replace)
H15	The CD tray closes immediately after it is opened.	Faulty contact of the CD tray open dete switch (SW790). (Check and replace)
H16	The CD tray opens immediately after it is closed.	Faulty contact of the CD tray open dete switch (SW791). (Check and replace)
F01	When the play button is pressed, the tape advances only slightly and then stops.	Reel pulse error. (Faulty Hall IC)(Check replace)
F02	TPS (Tape Program Search) does not work.	Faulty TPS signal detection or faulty pl control.Check and replace mechanism IC)
F15	When the CD Play button is pressed when either the power is off, or from some function other than CD, it takes excessive time (10 seconds or more) for the CD to play.	Faulty traverse inner circumference po detection switch (S701).(Check and rep
*F26	When the CD operation mode is selected by pressing CD display, and the CD does not play when it has been loaded.	Communication error between servo-p IC and microprocessor IC.(Check and r
F75	When a CD is loaded, “NO DISC” is displayed and the CD does not play.	Faulty CD circuit power supply. (Faulty supply IC or CD circuit power supply s (Check and replace). Flexible circuit bo become disconnected or broken wiring and replace) Faulty servo-processor IC and replace)

10. Operation Checks and Main Component Replacement Procedures

“ATTENTION SERVICER”

Some chassis components maybe have sharp edges. Be careful when diassembling and servicing.

1. **This section describes the procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For assembly after operation checks or replacement, reverse trhe respective procedures.**
   Special reassembly procedures are described only when required.
3. **Select items from the following index when checks or replacement are requirement.**
4. **Refer the part no. on the page of “Main Component Replacement Procedures”, if necessary.**

Content

- Checking Procedure for each major P.C.B.
1. Checking for the Panel P.C.B ..... P.g. 11 ~ 12
2. Checking of the Main & CD Servo P.C.B ..... P.g. 12 ~ 13
- Disassembly and Assembly of Traverse Deck ..... P.g.13 ~ 14
- Main Component Replacement Procedures ..... P.g.15 ~ 16

Warning:

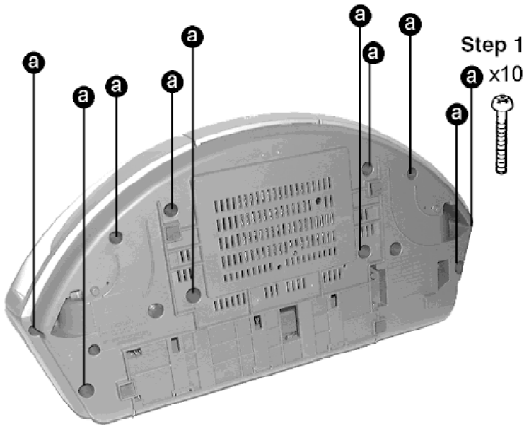
This product uses a laser diode. Refer to .

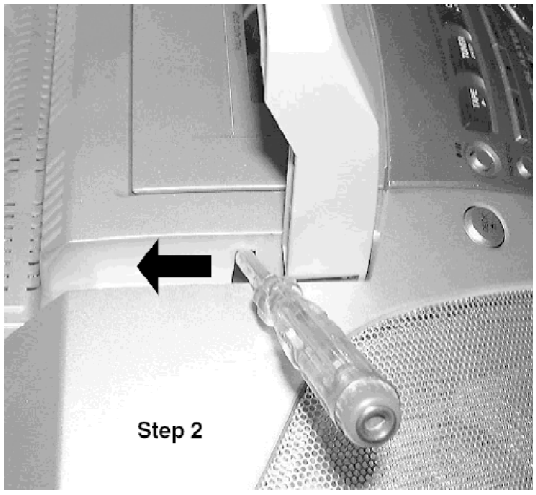
ACHTUNG:

Die Lasereinheit nicht zerlegen.
Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

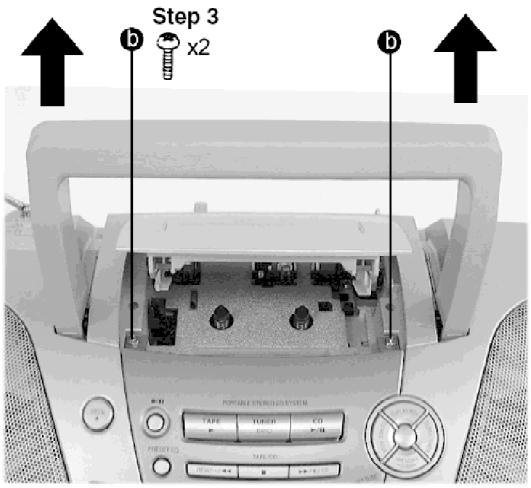
10.1. Checking Procedure for each major P.C.B.

10.1.1. Checking for the Panel P.C.B.

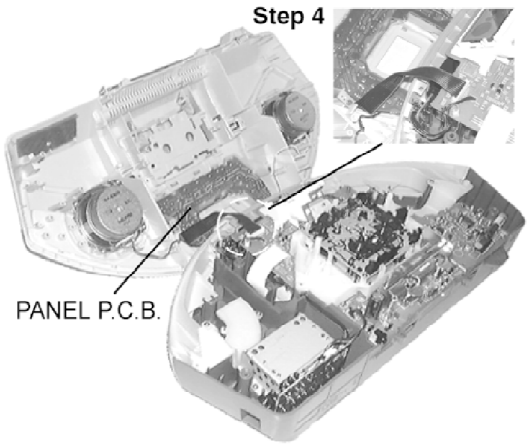




Step 2: Use a screw driver and insert into the hole. Slide the screw driver to the direction shown to open the cassette lid.

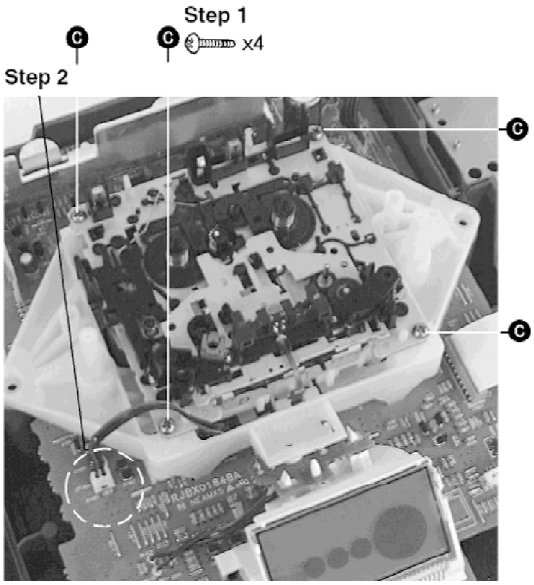


Step 3: Remove the two screws and lift up the front cabinet.

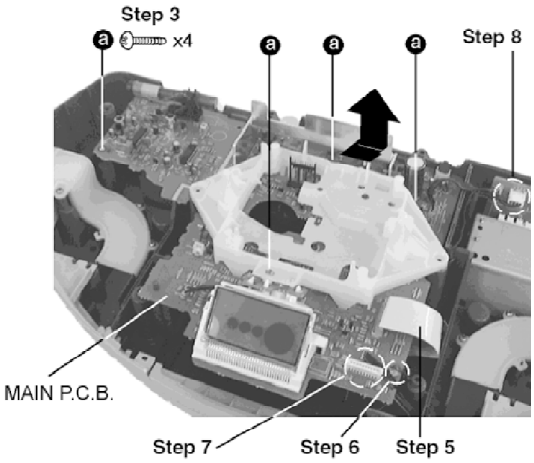


Step 5: Remove the FFC wire from CS601 and remove the front cabinet together with the Panel P.C.B.

10.1.2. Checking for Main & CD Servo P.C.B.



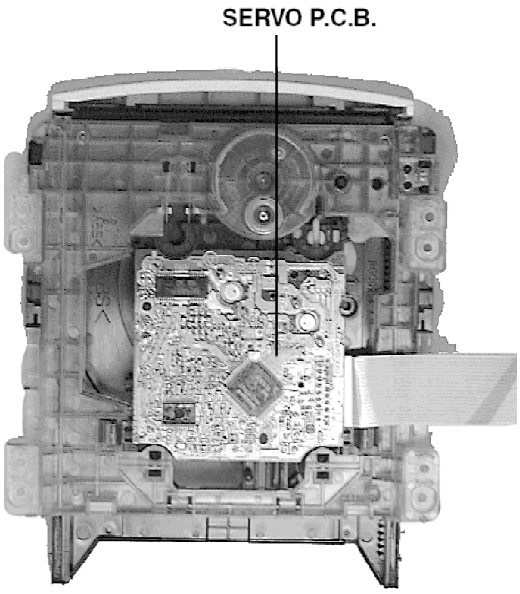
Step 2: Remove the connector CP1450 from the Main P.C.B.



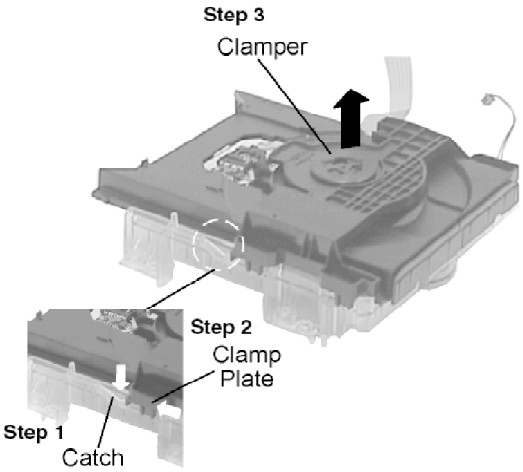
Step 4: Take out the mecha chasis according to the direction shown.

Step 5: Remove the FFC wire from CS801.

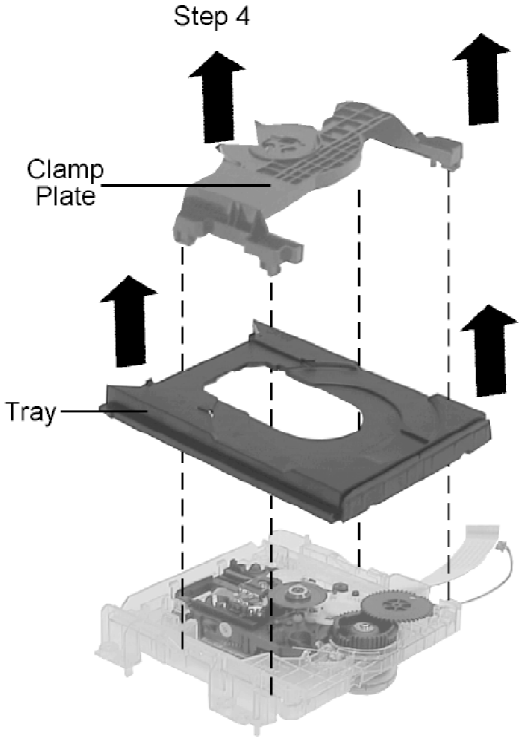
Step 6: Remove the FFC wire from CP802.
Step 7: Remove the FFC wire from CS601.
Step 8: Remove the wire from CP501 which is mounted on transformer P.C.B. Take out the Main P.C.B.



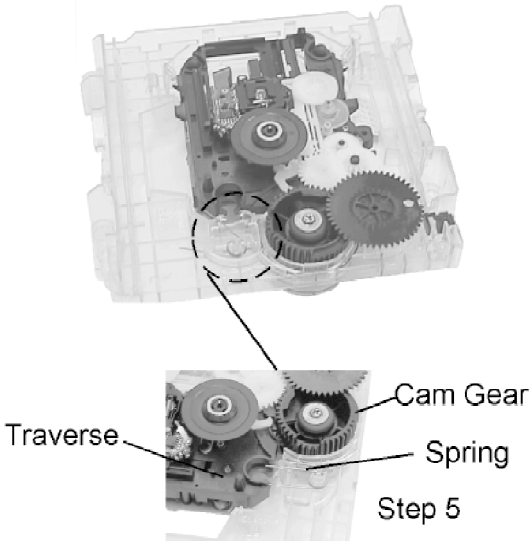
10.2. Disassembly and Assembly of Traverse Deck



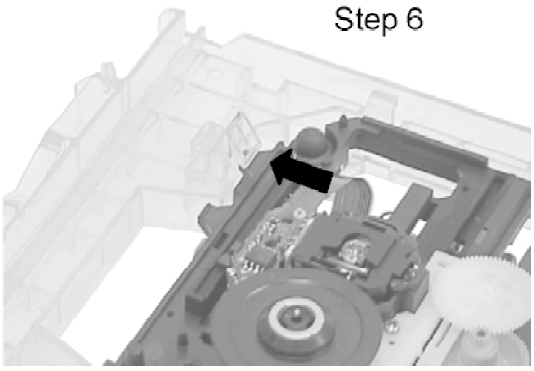
Step 1: Press down both catches on both side as shown.
Step 2: Push the clamp plate towards the catches.
Step 3: Pull the clamper away from the magnet situated inside the fixed plate.



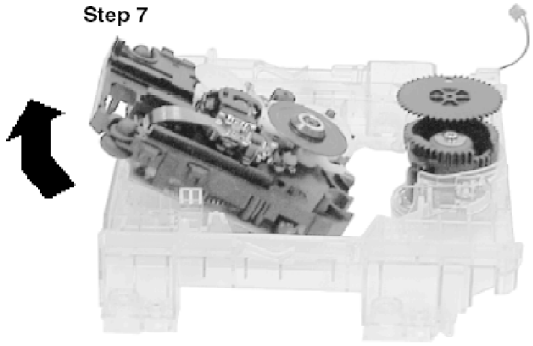
Step 4: Remove the clamp plate and tray in sequence.



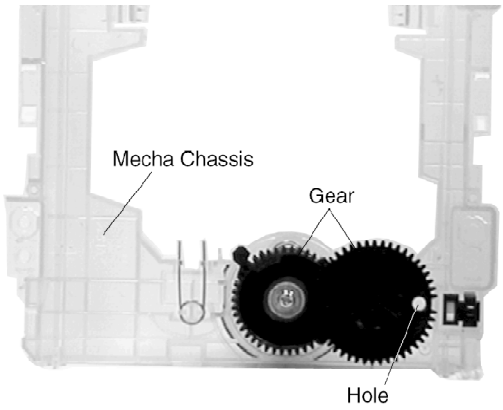
Step 5: Push the cam gear drive to about 30 anticlockwise. Shift the spring away from the traverse.



Step 6: Press on the catch on both sides one at a time. While pressing, shift the traverse up in the manner of left to right.



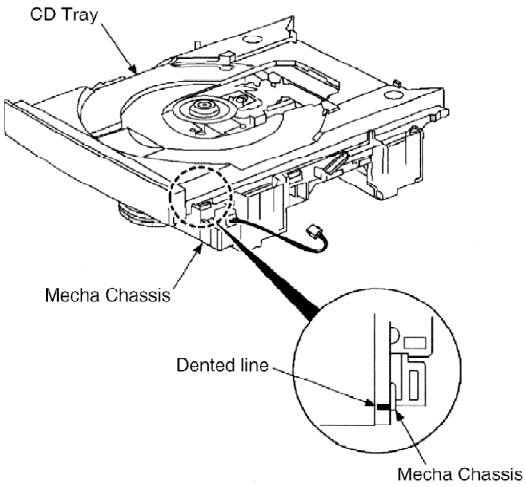
Step 7: Take out the traverse in a slanting manner.



Note:

1. Follow the reverse procedure to replace the CD Traverse Unit and CD Tray.

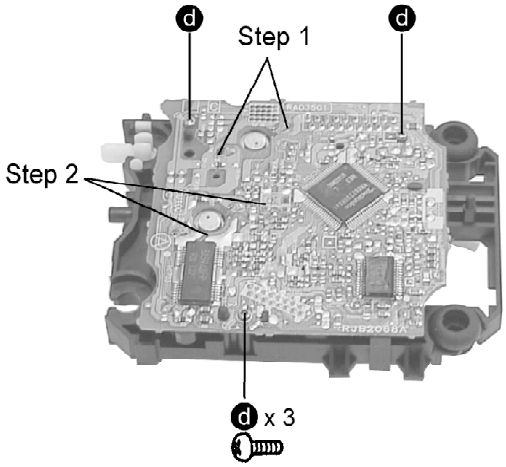
2. Make sure that the two gear is in this position and the hole on the right gear is align with the hole below it when replacing the CD Traverse Unit and CD Tray.



Note:

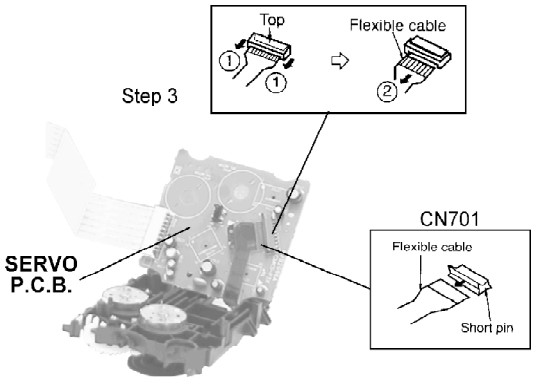
When replacing the CD Tray, make sure the dented line is at position as shown.

10.3. Main Component Replacement Procedures



Step 1: Desolder 2 terminals of the traverse motor.

Step 2: Desolder 2 terminals of the spindle motor.

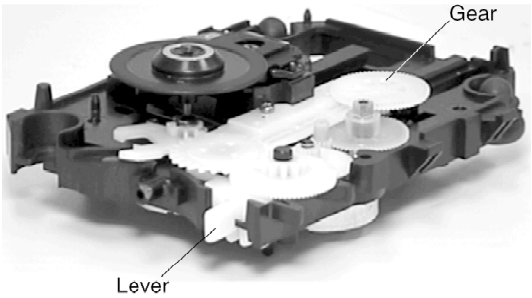


Step 3: Remove the flexible cable from CN701.

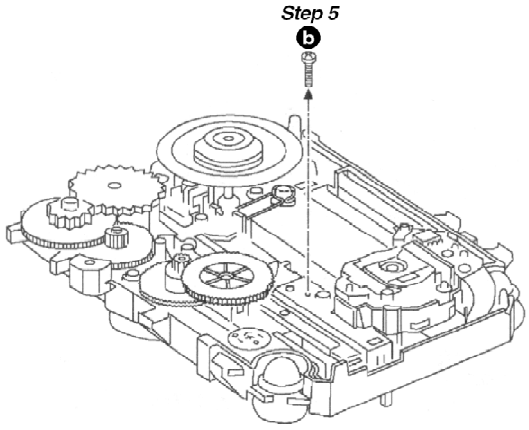
- Removal of the flexible cable.

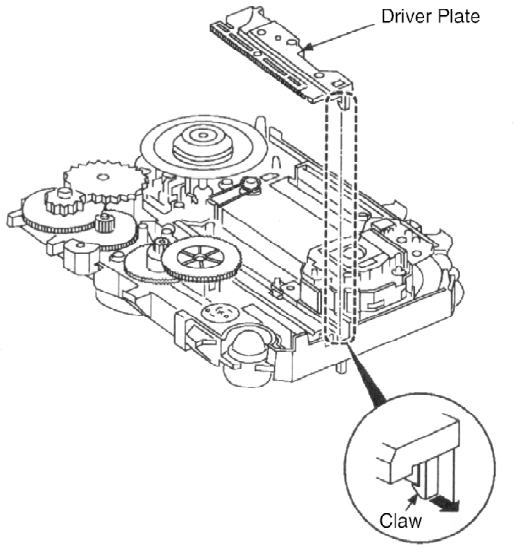
Push the top of the connector in the direction of arrow 1 and pull

out the flexible cable in the direction of arrow 2.

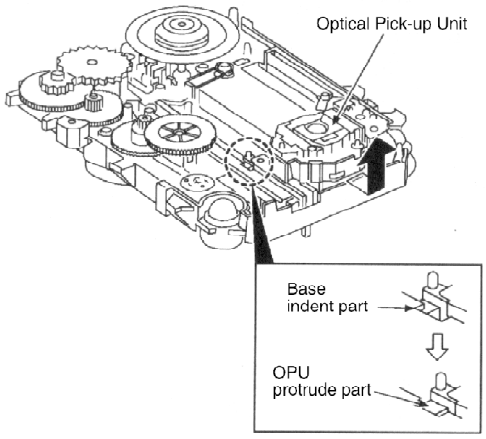


Step 4: Push the lever in and turn the gear clock wise fully.

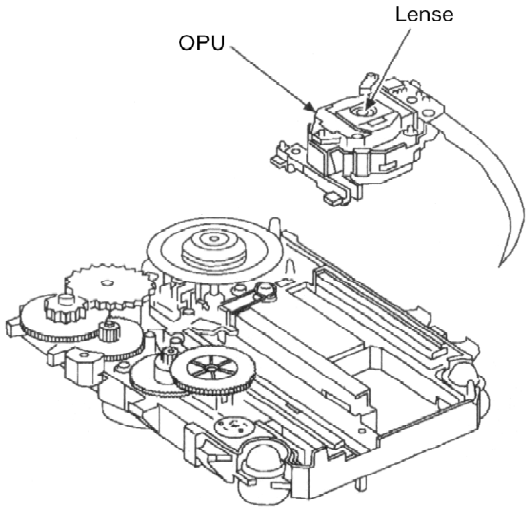




Step 6: Release the claw and remove the Driver Plate.



Step 7: Slide out the Optical Pick-up Unit from the indent opening.



Step 8: Do not touch the lense on the OPU.

11. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology.)
Notes:

S601 : FF SWITCH
S602 : REW SWITCH
S603 : TAPE/CD STOP SWITCH
S604 : POWER SWITCH
S605 : GEQ SWITCH
S606 : VOLUME DECREASE SWITCH
S607 : VOLUME INCREASE SWITCH
S621 : CD OPEN/CLOSE SWITCH
S622 : MEMORY SWITCH
S623 : CLOCK/TIMER SWITCH
S624 : TIMER PLAY/REC SWITCH
S625 : CD REC MODE SWITCH
S626 : CD PLAY/PAUSE SWITCH
S627 TUNER BAND SWITCH
S628 TAPE PLAY SWITCH
S629 PAUSE/PLAY SWITCH
S630 : DECK EJECT SWITCH
S701 : RESET SWITCH
S780 OPEN SWITCH
S951 : MODE SWITCH
S952 : LEAF SWITCH
S954 : LEAF SWITCH

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

< >	**; FM**	**No Mark**	**: Tape**
( )	**: AM**	**[ ]**	**: Standby**
(( ))	**: CD**		

- Importance safety notice:
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistor), high-quality sound (capacitors), low-noise (resistor), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list. /

Caution !

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.

- Put a conductive mat on the work table.

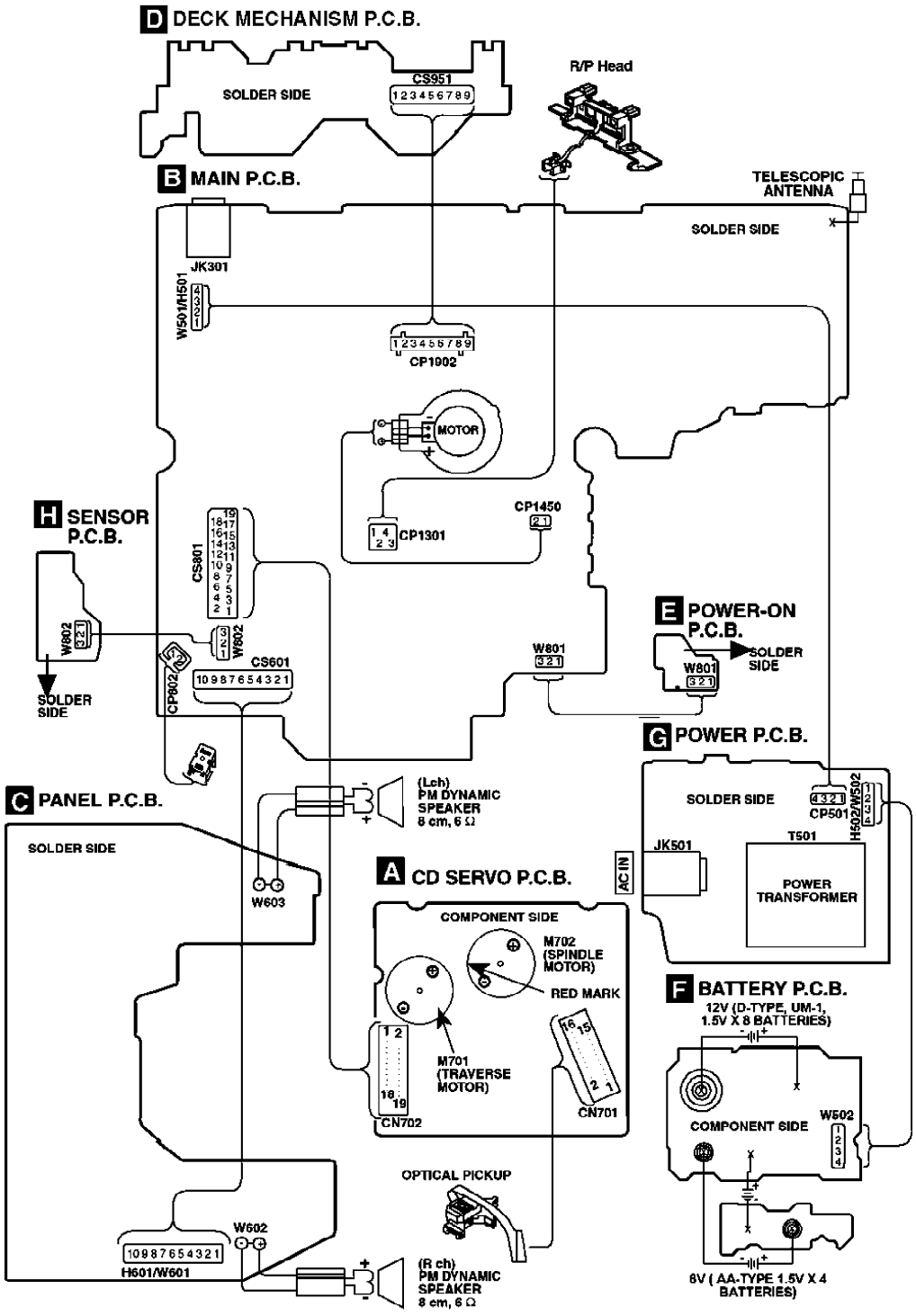
- Ground the soldering iron.

- Do not touch the pins of IC, LSI or VLSI with fingers directly.

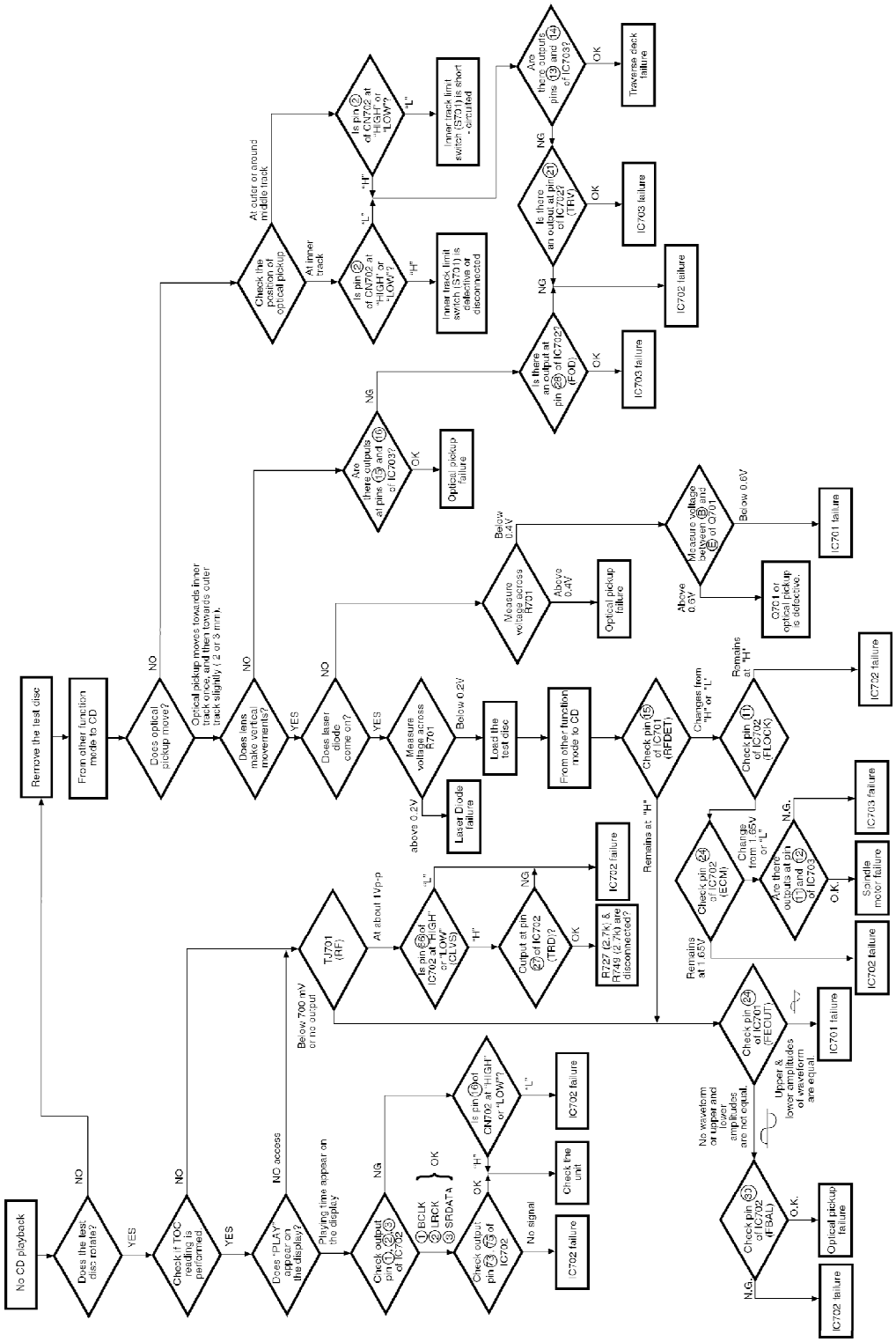
12. Printed Circuit Board

(This printed circuit board diagram may be modified at any time with the development of new technology.)

13. Wiring Connection Diagram



14. Troubleshooting Guide



15. Measurements and Adjustments

15.1. Tuner Section

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT
1. Set selector switch to AM or TAPE.
2. Set volume level to 40.
3. Output of signal generator should be no higher than necessary to obtain an output reading.

- AM-RF ALIGNMENT

Signal Generator or Sweep Generator		Radio Dial Setting	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment(Shown in Fig.1)	R
Connections	Frequency				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	594 kHz	Point of non-interference (on/about 600 kHz)	Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	[*1] L3 (AM ANT coil)	Adju max outp
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	1503 kHz	Point of non-interference (on/about 600 kHz)	Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	CT1 (AM ANT Trimmer)	Adju max outp

[*1] Fix antenna coil with wax after completing alignment.

- FM-RF ALIGNMENT

Signal Generator or Sweep Generator		Radio Dial Setting	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment(Shown in Fig.1)	R
Connections	Frequency				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	87.5 MHz	Point of non-interference (on/about 600 kHz)	Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	[*1] L4 (AM IFT)	Adju max outp

- HEAD AZIMUTH ALIGNMENT

Test Tape	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment	Remarks
QZZCFM (8 kHz, -20 dB)	Headphone Jack (32 Ω)Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Azimuth Screw (Shown in Fig. 3)	1. Insert a test tape (QZZFCM) and start playba forward direction. 2. Adjust the azimuth screw for maximum wav the oscilloscope and the similar output on L a channels. 3. When adjusting the azimuth in the reverse d repeat the adjustment several times because c slip on the forward direction side.

CAUTION:

- Please remove the screw-locking bond left on the head base when replacing the azimuth screw.

- After the adjustment, apply screw lock to the azimuth adjusting screw. (Screw-locking bond: RZZ0L01)

- TAPE SPEED ALIGNMENT

Test Tape	Equipment Connection Electronic Counter	Adjustment	Specification	Remarks
QZZCWAT (3 kHz, -10 dB)	Headphone Jack (32 Ω)Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	—	3000 ± 90 Hz	Playmode

- BIAS AND ERASE VOLTAGE CHECK

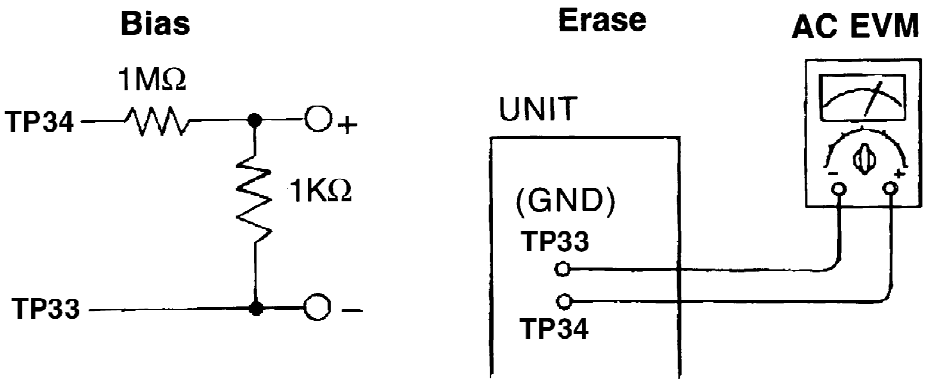
1. Set the unit to “TUNER MODE” position.

2. Insert the Normal blank tape (QZZCRA) into DECK and set the unit to “REC” mode (use “ ● REC / STOP” key).

3. Measure and make sure that the output is within the standard value.

4. Insert the CrO2 tape (QZZCRX).

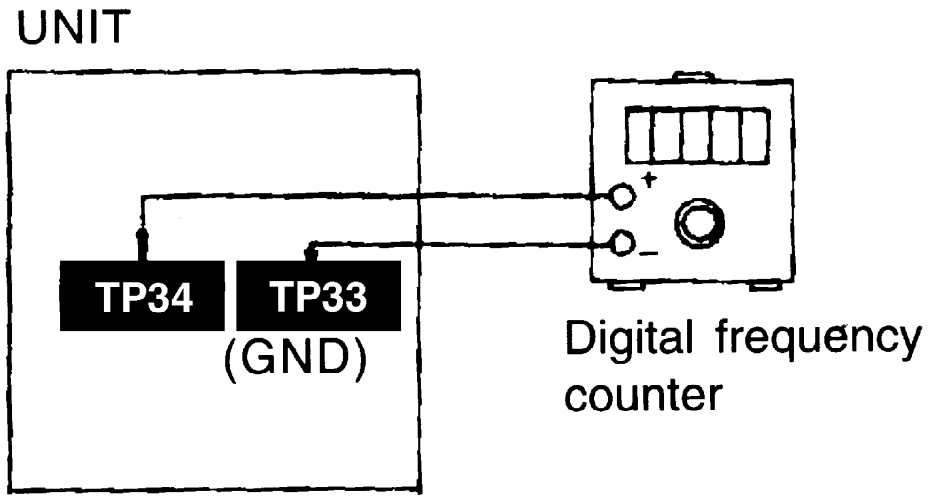
5. Repeat steps 2 and 3.



Bias voltage for Deck (Standard value): 17.3 ± 1mV (Normal)

- BIAS FREQUENCY ADJUSTMENT

1. **Set the unit to “TUNER MODE” position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK and set the unit to “REC” mode (use “ ● REC / STOP” key).**
3. **Adjust CP1301 so that the output frequency is within the standard value.**



Standard value: 100 ± 7kHz

15.2. CD Section

Alignment is unnecessary for CD section of this unit.

15.2.1. Alignment Points

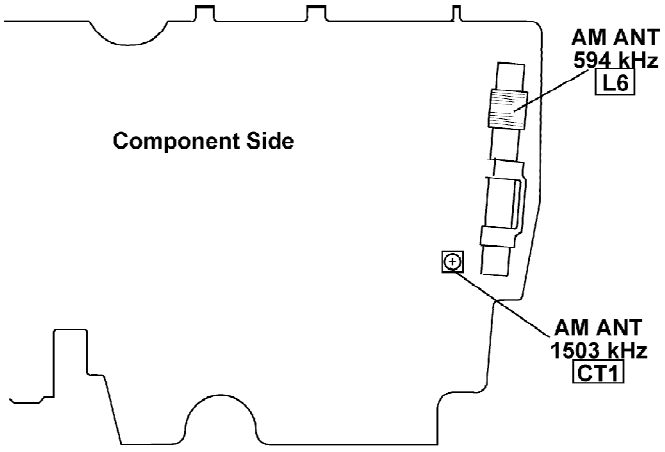


Fig 1

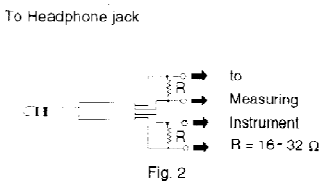


Fig. 2

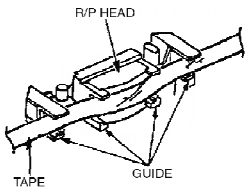


Fig. 3

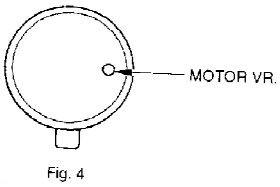


Fig. 4

16. Type Illustration of IC's, Transistors and Diodes

C1BA00000331 (24P) C1CA00000198 (22P) BA5948FPE2 (28P)	C1BA00000275	S81350HG-Z S-80733ANY-Z	LC75342	AN8885SBE1 (28P)	MN662790RSC (80P) MN101C38ABB (100P)
0N2180RLC1	C1AA00000612 (5P)	AN7317	2SA1037AKSTX	2SC1740SLNRT 2SD2470TP B1GACFNN007 RVTDTC114YST RVTDTC143TST RVTDTC143XST B1GCCFGH0002 RVTDTC114EST	
2SA1515STPQ 2SD1450RSTA 2SC1741ASTPR 2SA854STPQ		B1ACND000003	B1DEDQ000004	KTA1267GRTA	KTC3199GRTA
KTA1046	KV1520NT1-2 B0CBBB000004	B0AACK000004 1SR35400V MA165TA	B0BA01100004 B0BA5R000004 B0BA8R700009 B0BA6R100003 B0BA7R500006	B3AGA0000026	MAZ80560ML

17. Terminal Function Of IC's

- IC701 (AN8885SBE1) Servo Amplifier

Pin No.	Mark	I/O	Function
1	PDE	I	Tracking signal input 1
2	PDF	I	Tracking signal input 2
3	VCC	I	Power supply
4	PDA	I	Focus signal input terminal 1
5	PDB	I	Focus signal input terminal 2
6	LPD	I	APC amp input
7	LD	O	APC amp output
8	RF	O	RFsumming output
9	RFIN	I	Detector's input
10	CSBRT	I	Capacitor for OFTR connection
11	CEA	I	Capacitor for HPF amp connection
12	BDO	O	BDO output ("H" : drop out)
13	LDON	I	APC control
14	GND	—	Ground
15	/RFDET	O	NRFDET output ("L" : detection)
16	PDOWN	O	Power-down input
17	OFTR	O	OFTR output
18	NC	O	N.C.
19	ENV	O	3T-ENV output
20	NC	I	N.C.
21	NC	I	N.C.
22	TEN	I	TE amp input
23	TEOUT	O	TE amp output
24	FEOUT	O	FE amp output
25	FEN	I	FE amp input
26	VREF	O	Reference voltage output
27	TBAL	I	Tracking balance control
28	FBAL	I	Focus balance control

- IC702 (MN662790RSC) Servo Processor/Digital Processor/Digital Filter/D/A Converter

Pin No.	Mark	I/O	Function
1	BCLK	O	N.C.
2	LRCK	O	N.C.
3	SRDATA	O	N.C.
4	DVDD1	I	Power supply input (for digital circuit)
5	DVSS1	I	GND (for digital circuit)
6	TX	O	Digital audio interface signal output (Latches data at first transition)
7	MCLK	I	Microprocessor command clock signal input
8	MDATA	I	Microprocessor command data signal input
9	MLD	I	Microprocessor command load signal input
10	SENSE	O	Sense signal output (OFT,FESL,MAGEND,NAJEND, POSAD,SFG) (Not used, open)
11	/FLOCK	O	Focus servo feeding signal output (“L”: Feed)
12	/TLOCK	O	Tracking servo feeding signal output (“L”: Feed)
13	BLKCK	O	Sub-code block clock signal output (BLKCKf = 75Hz during normal playback)
14	SQCK	I	External clock signal input for sub-code Q resistor
15	SUBQ	O	Sub-code Qcode output
16	DMUTE	I	Muting input (“H”: mute)
17	STAT	O	Status signal output (CRC,CUE,CLVS,TTSTVP, FCLV,SQC)
18	/RST	I	Reset signal input
19	SMCK	O	1/2-divided clock signal of crystal oscillating at MSEL = “H” (fSMCK = 8.4672 MHz) 1/4-divided clock signal of crystal oscillating at MSEL = “L” (fSMCK = 4.2336 MHz)
20	CSEL	I	Frequency Selection Terminal H = 33.8688 MHz; L = 16.9344 MHz
21	TRV	O	N.C.
22	TVD	O	Traverse drive output
23	PC	O	Spindle motor ON output (“L”: ON)

			ON)

Pin No.	Mark	I/O	Function
24	ECM	O	Spindle motor drive signal output (forced mode output)
25	ECS	O	Spindle motor drive signal output (servo error signal output)
26	KICK	O	N.C.
27	TRD	O	Traverse drive output
28	FOD	O	Focus drive output
29	VREF	I	D/A (drive) output (TVD,ECS,TRD,FOD,FBAL,TBAL) Reference voltage input
30	FBAL	O	Focus balance adjustment output
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input
35	VDET	I	Vibration detection signal input (“H”: detection)
36	OFT	I	Off-track signal input (“H”: off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detection signal input (“L: detection)
39	BDO	I	Dropout signal input (“H”: Dropout)
40	LDON	O	Laser on signal input (“H”: ON)
41	PLLF2	I/O	N.C.
42	DSLF2	O	Tracking Offset alignment output/DSL Balance Output (DA Output)
43	WVEL	O	N.C.
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	DSL bias terminal (Not used, open)
47	DSLF	I/O	DSL loop filter terminal
48	PLLF	I/O	Pll loop filter terminal
49	VCOF	I/O	VCO loop filter terminal
50	AVDD2	I	Power supply input (for analog circuit)

Pin No.	Mark	I/O	Function
51	AVSS2	I	GND (for analog circuit).
52	EFM	O	EFM signal output
53	PCK	O	PLL extraction clock output (fPCK = 4.321 MHz during normal playback)
54	VCOF2	I/O	VCO loop filter for 33.8688 MHz conversation terminal for 16.9344 MHz crystal mode, must use other circuit
55	SUBC	O	Sub-code serial data output
56	SBCK	I	Clock input for sub-code serial data
57	VSS	I	GND
58	X1 IN	I	Crystal oscillating circuit input (f = 16.9344MHz)
59	X2 OUT	O	Crystal oscillating circuit input (f = 16.9344MHz)
50	VDD	I	Power supply input (for oscillating circuit)
61	BYTCK	O	Byte clock output
62	/CLDCK	O	Sub-code frame clock signal output (fCLDCK = 7.35 kHz during normal playback)
63	FCLK	O	Crystal frame clock signal output (fCLK = 7.35 kHz, double = 14.7 kHz)
64	IPFLAG	O	Interpolation flag output (“H”: Interpolation)
65	FLAG	O	Flag output
66	CLVS	O	Spindle servo phase synchronizing signal output (“H”: CLV, “L”: rough servo)
67	CRC	O	Sub-code CRC checked output (“H”: OK, “L”: NG)
68	DEMPH	O	De-emphasis ON signal output(“H”:ON)
69	RESY	O	Frame re-synchronizing signal output
70	IOSEL	I	Mode Switching Terminal
71	/TEST	I	Test input
72	AVDD1	I	Power supply input (for analog circuit)
73	OUTL	O	Left channel audio signal output
74	AVSS1	I	GND

Pin No.	Mark	I/O	Function
75	OUTR	O	Right channel audio signal output
76	RSEL	I	RF signal polarity assignment input (at “H” level, RSEL=”H”, at “L” level, RSEL=”L”)
77	IOVOD	I	5V supply input
78	PSEL	I	Test terminal (connected to Gnd)
79	MSEL	I	SMCK oscillating frequency designation input(“L”: 4.2336MHz, “H”:8.4672MHz)
80	SSEL	I	SUBQ output mode select (“H”: Q-code buffer mode)

- IC703 (BA5948FPE2) Focus Coil/Tracking Coil/Traverse Motor/ Spindle Motor Drive

Pin No.	Mark	I/O	Function
1	IN2	I	Motor driver (2) input
2	MUTE2	I	Driver mute control input (CH2)
3	IN1	I	Motor driver (1) input
4	MUTE1	I	Driver mute control input (CH1)
5	NC	-	Not used
6	NC	-	Not used
7	NC	I	Not used
8	NC	-	Not used
9	PGND1	-	Ground connection (1) for driver
10	PVCC1	I	Power supply (1) for driver
11	D1-	O	Motor driver (1) reverse - action output
12	D1+	O	Motor driver (1) forward - action output
13	D2-	O	Motor driver (2) reverse - action output
14	D2+	O	Motor driver (2) forward - action output
15	D3-	O	Motor driver (3) reverse - action output
16	D3+	O	Motor driver (3) forward - action output

Pin No.	Mark	I/O	Function
17	D4-	O	Motor driver (4) reverse - action output
18	D4+	O	Motor driver (4) forward - action output
19	PVCC2	I	Power supply (2) for driver
20	GND	-	GND (CH2,CH3.CH4)
21	NC	-	Not used
22	NC	-	Not used
23	NC	-	Not used
24	NC	-	Not used
25	VCC	I	Power supply terminal
26	BIAS	I	Bias amplifier input
27	IN4	I	Motor driver (4) input
28	IN3	I	Motor driver (3) input

- IC801 (MN101C38ABB) MICON

Pin No.	Mark	I/O	Function
1	COM3	O	LCD common output
2	COM2	O	LCD common output
3	COM1	O	LCD common output
4	COM0	O	LCD common output
5	VLC3	-	LCD bias
6	VLC2	-	LCD bias
7	VLC1	-	LCD bias
8	VDD	-	VDD +5V
9	OSC2	O	4.19 MHz Ceramic OSC output
10	OSC1	I	4.19 MHz Ceramic OSC input
11	VSS	-	Ground
12	X1	I	32.768kHz OSC input
13	X0	O	32.768kHz OSC output
14	MMOD	I	Microprocessor mode set to “L”
15	VREF-	-	Analog reference ground
16	KEY1	A/D	Key input 1
17	KEY2	A/D	Key input 2
18	REG_1	I	Region setting 1
19	REG_2	I	Region setting 2
20	REG_3	I	Region setting 3
21	REG_4	I	Region setting 4

Pin No.	Mark	I/O	Function
22	PDET	A/D	Power supply voltage detect
23	ADL_IN	A/D	Deck mechanism condition input
24	VREF+	O	+5 reference for A/D
25	NC	O	No connection
26	SUBQ	I	CD subcode data input
27	SQCK	O	CD subcode data clock
28	MBP1	O	Micro-P beat proof control output 1
29	MBP2	O	Micro-P beat proof control output 2
30	T_MUTE	O	Tuner mute
31	PLL DO	I	PLL if count input
32	/RESET	I	System reset input
33	PLL DA	O	PLL data output
34	PLL CLK	O	PLL clock output
35	PLL CE	O	PLL chip enable output
36	BP	O	Beat proof for AM
37	/DMT	O	Tape mute output
38	BLKCK	I	CD subcode block clock input
39	RMT_IN	I	Remote control input
40	/VCCDET	I	Laser on signal input (“H”: ON)
41	CDOP_SW	I	CD open switch
42	PHOTO_I	I	Tracking Offset alignment output/DSL Balance Output (DA Output)
43	MOTOR_L	O	N.C.
44	REC_H	O	RF signal input
45	PL	O	Reference current input
46	SP_CLK	O	DSL bias terminal (Not used, open)
47	SP_DAT	O	DSL loop filter terminal
48	ST_LTH	O	Pll loop filter terminal
49	CD_L	O	VCO loop filter terminal
50	MUTE_A	O	Power supply input (for analog circuit)
51	MCLK	O	GND (for analog circuit).
52	MDATA	O	EFM signal output
53	MLD	O	PLL extraction clock output (fPCK = 4.321 MHz during normal playback)
54	STAT	I	CD status input

Pin No.	Mark	I/O	Function
55	CD_RESET	O	CD RST output
56	RESET_SW	I	CD limit SW input for the most inner point
57	CD_OPEN	O	CD open input
58	CD_CLOSE	O	CD close input
59	PCNT	O	Power control output
60	REM_STBY	I	Remote standby
61	AI_JOG1	I	AI JOG input 1
62	AI_JOG2	I	AI JOG input 2
63	EDATA	I/O	EEPROM data
64	ECLK	O	EEPROM clock
65	ECS	O	EEPROM chip select
66	UNUSED	I	Connect to GND
67	CD_LCLOSE	O	CD CLOSE SLOW
68	CD_LOPEN	O	CD OPEN SLOW
69	SV	O	Sound virtualizer
70	SEG31	I	Connect to GND
71~100	SEG30~SEG1	O	LCD segment drive output

18. Parts Location and Replacement Parts List

Note:

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purpose of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)

Parts without these indications can be used for all areas.

- Warning: This product uses a laser diode. Refer to caution statements on

ACHTUNG:

Die Lasereinhelt nicht zerlegen.

Die Lasereinhelt darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

- Capacitor values are in microfarads (μ F) unless specified

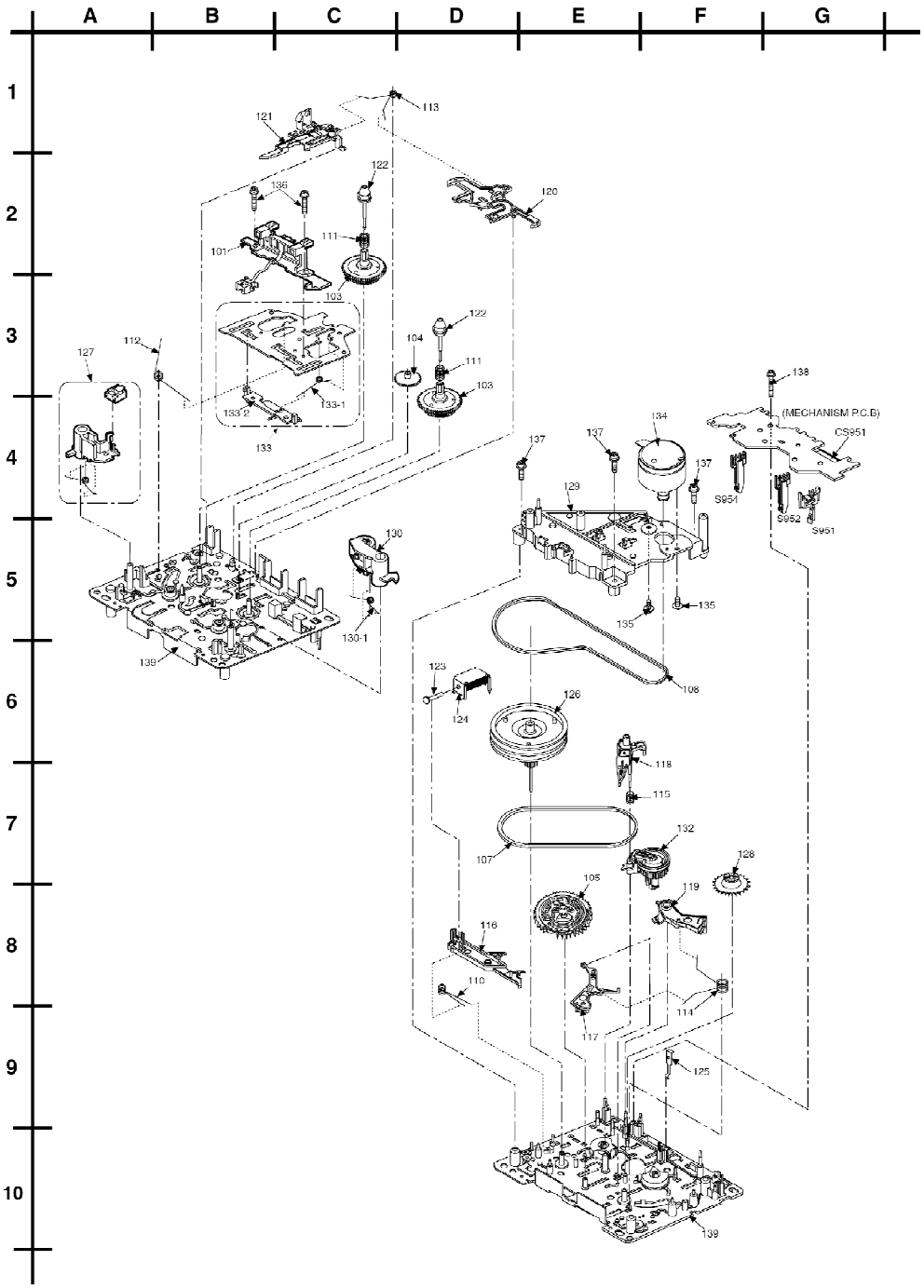
otherwise, P=Pico-farads (pF), F=Farads.

- **Resistance value are in ohms, unless specified otherwise, 1K= 1,000 (OHM).**
- **The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws govening part and product retention. After the end of this period, the assembly will no longer be available.**
- **[M] Indicates in the Remarks columns indicates parts supplied by MESA.**
- **The "(SF)" mark denotes the standard part.**
- **Reference for O/I book languages are as follows:**

Ar	**: Arabic**	**Cf**	**: Canadian French**	**Cz**	**: Czech**	**Da**	**: Danish**
Du	**: Dutch**	**En**	**: English**	**Fr**	**: French**	**Ge**	**: German**
It	**: Italian**	**Ko**	**: Korean**	**Po**	**: Polish**	**Ru**	**: Russian**
Sp	**: Spanish**	**Sw**	**: Swedish**	**Co**	**: Traditional Chinese**	**Cn**	**: Simplified Ch**

18.1. Deck Mechanism (RAA4401-1V)

18.1.1. Deck Mechanism Parts Location

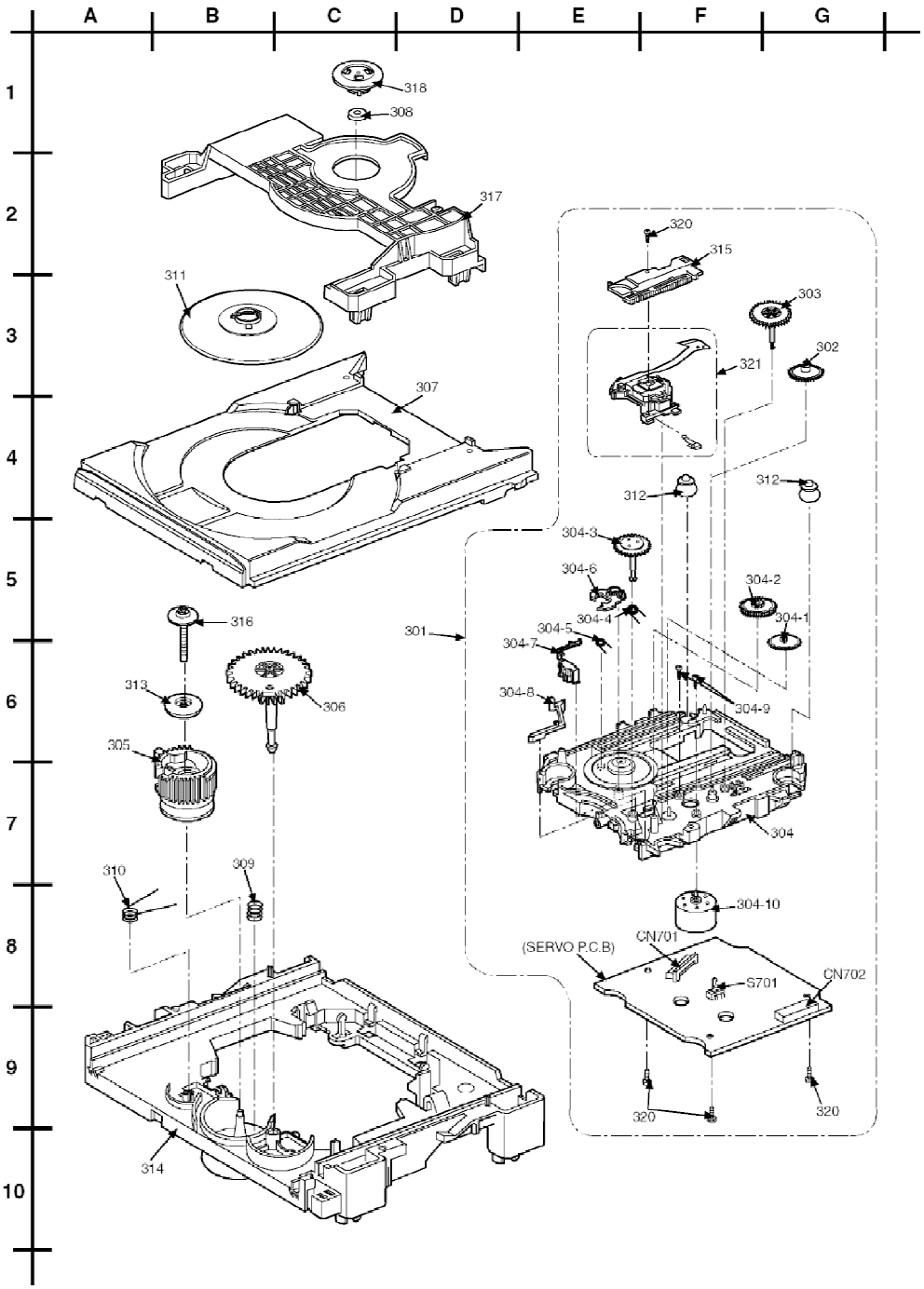


18.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0062	HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAB PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SP	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133-1	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASSY	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0049	FLYWHEEL ‘F’ ASS’Y	[M]
127	RXL0151	E-HEAD ARM ASS’Y	[M]
128	RXG0040	FF RELAY GEAR ASS’Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ARM ‘F’ ASS’Y	[M]
130-1	RMB0401	PINCH ARM SPRING ‘F’	[M]
132	RXL0126	WINDING ARM ASS’Y	[M]
133	RXQ0412	HEAD PANEL ASS’Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	RFKPXES50GCK	CAP MOTOR ASS’Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RMK0294	MECHA CHASSIS	[M]

18.2. CD Loading Mechanism

18.2.1. CD Loading Mechanism Parts Location

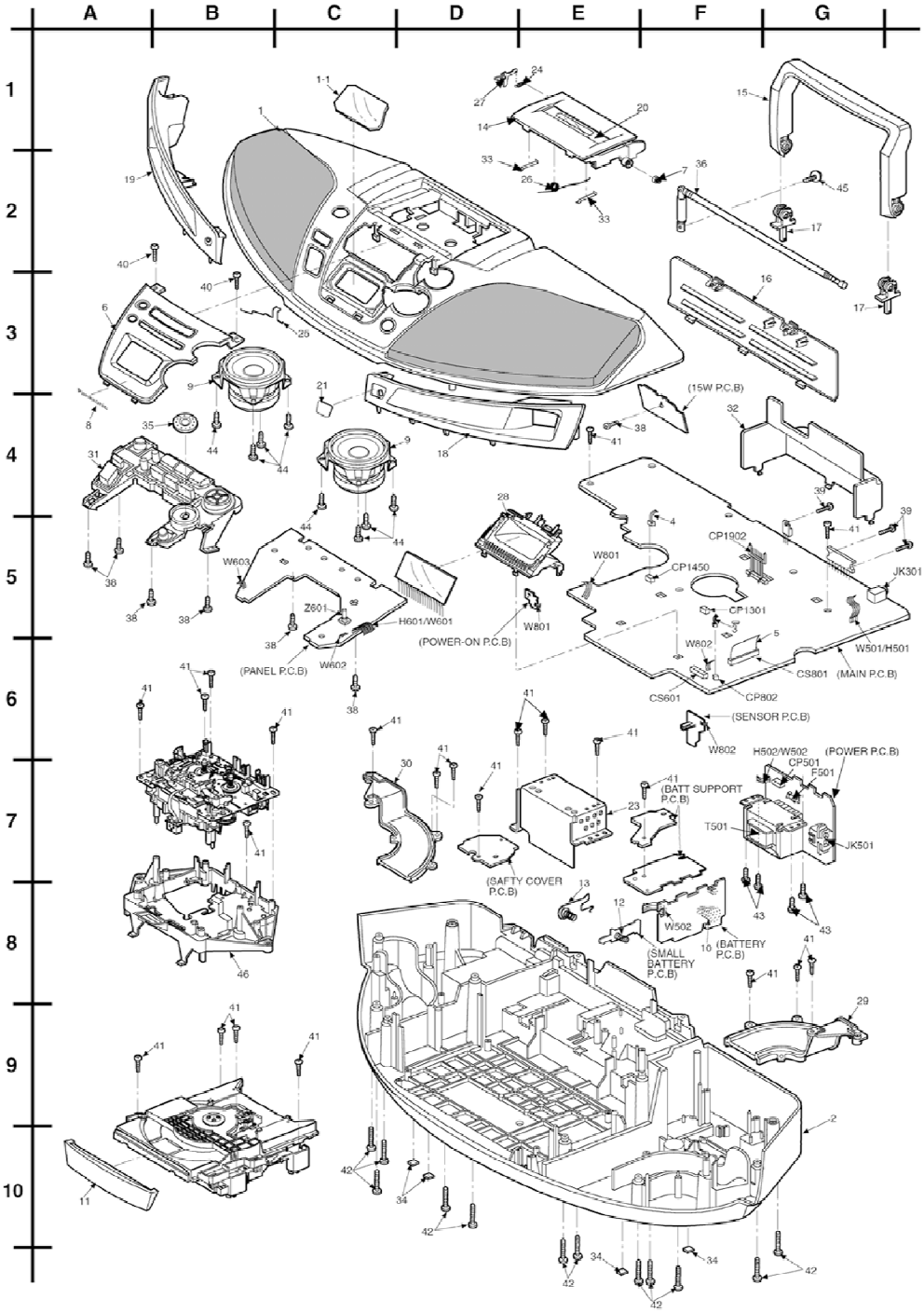


18.2.2. CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RAE0155Z-1V	CT100W TRAVERSE	[M]
302	RDG0455	TRAVERSE GEAR (A)	[M]
303	RDG0456	TRAVERSE GEAR (B)	[M]
304	RFKNCT100	TRAVERSE BASE ASS'Y	[M]
304-1	RDG0457	LOAD GEAR (A)	[M]
304-10	RXQ0632	TRV MOTOR UNIT	[M]
304-2	RDG0458	LOAD GEAR (B)	[M]
304-3	RDG0459	LOAD GEAR (C)	[M]
304-4	RME0290	PRESS SPRING	[M]
304-5	RME0291	LOCK SPRING	[M]
304-6	RML0551	TRG LEVER	[M]
304-7	RML0552	LOCK LEVER	[M]
304-8	RMM0219	STOPPER	[M]
304-9	XQN17+C28F	SCREW	[M]
305	RDG0460	CAM GEAR	[M]
306	RDG0461	DRIVE GEAR	[M]
307	RGQ0254-K	TRAY	[M]
308	RHM0001	MAGNET	[M]
309	RMB0603	FLOATING SPRING	[M]
310	RME0288	CENTERING SPRING	[M]
311	RFKNXED50-S	CLAMPER HOLDER ASS'Y	[M]
312	RMG0510-K	FLOATING RUBBER (A)	[M]
313	RMG0511-K	FLOATING RUBBER (B)	[M]
314	RMK0422	MECHA CHASSIS	[M]
315	RMM0218	TRAVERSE DRIVE RACK	[M]
316	RHD30083	CAM. GEAR SCREW	[M]
317	RMR1223-K	CLAMP PLATE	[M]
318	RMR1242-X1	FIXTURE	[M]
320	XTN2+6G	SCREW	[M]
321	RXQ0704	OPU UNIT	[M]

18.3. Cabinet

18.3.1. Cabinet Parts Location



18.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RFKKXES25EBS	UPPER CABIENT ASS'Y	[M]
1-1	RKWX0140-Q	LCD PANEL	[M]
2	RFKJXES22EBS	BOTTOM CABINET ASS'Y	[M]EB
2	RKSX0036N-H	BOTTOM CABINET	[M]EG
2	RKSX0036P-H	BOTTOM CABINET	[M]E
3	REX0980	MAIN TO CD	[M]
4	REXX0212	MOTOR WIRE	[M]
5	REEX0080	CD FFC	[M]
6	RGKX0052C-S	FRONT PANEL	[M]
7	RDG0183-J	DAMPER GEAR	[M]
8	RGB0115-S	BADGE	[M]
9	RAS8P23-B	SPEAKER	[M]
10	RJC511XA	BATTERY TERMINAL	[M]
11	RGKX0051-K	CD TRAY LID	[M]
12	RJC751YB	UM-3 BATTERY SPRING	[M]
13	RJC91008-1	+- BATTERY TERMINAL	[M]
14	RKFX0080-S	CASS. LID	[M]
15	RKHX0011-H	HANDLE	[M]
16	RKK0073-1H	BATTERY COVER	[M]
17	RKQ0224-W	HANDLE FIXTURE	[M]
18	RKTX0007-K	SPK. PORT (R)	[M]
19	RKTX0008B-K	SPK. PORT (L)	[M]
20	RKWX0141-Q	CASS. PANEL	[M]
21	RKWX0142A-Q	REMOCON PANEL	[M]
23	RMAX0045-1	TRANS. BRACKET	[M]
24	RMB0448-J	LOCK ROD SPRING	[M]
25	RME0270	R. ANT TERMINAL	[M]
26	RMEX0010	CASS OPEN SPRING	[M]
27	RMM0163-1	CASS LOCK ROD	[M]
28	RMNX0031	LCD HOLDER	[M]
29	RMVX0048	PORT COVER RIGHT	[M]
30	RMVX0049	PORT COVER LEFT	[M]
31	RYQX0032-S	CTRL. BUTTON UNIT	[M]
32	RMYX0043	HEAT SINK	[M]
33	RUS757ZAA	CASS HALF SPRING	[M]
34	RHGV0008	LEG CUSHION	[M]
35	RGWX0050-A	JOG KNOB	[M]
36	XEARR210C-Y	ROD ANTENNA	[M]
38	XTBS26+10J	SCREW	[M]
39	XTV3+10F	SCREW (HEAT SINK)	[M]
40	XTB3+12CFN	SCREW	[M]
41	XTV3+12G	SCREW	[M]
42	XTV3+20G	CASING SCREW	[M]
43	XTV3+6F	SCREW	[M]
44	XTV3+10G	SCREW	[M]
45	XYN3+F12FY	ROD ANT SCREW	[M]
46	RMKX0037	MECHA CHASSIS	[M]

18.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		P.C.B.	
	REP2807D	CD SERVO P.C.B.	[M]
	REPX0193G	MAIN P.C.B./POWER-ON P.C.B./BATTERY P.C.B./SENSOR P.C.B./ POWER P.C.B.	[M]
	REPX0195A	PANEL P.C.B.	[M]
	REPX0108E	DECK MECHANISM P.C.B.	[M]
		INTEGRATED CIRCUITS	
IC1	C1BA00000331	IC TUNER	[M]
IC2	C1CA00000198	IC PLL	[M]
IC301	C1BA00000275	IC POWER	[M] ⚠
IC302	S81350HG-Z	IC 5V REGULATOR	[M] ⚠
IC304	LC75342	IC SOUND	[M]
IC701	AN8885SBE1	IC HEAD AMP	[M]
IC702	MN662790RSC	IC LSI	[M]
IC703	BA5948FPE2	IC 4CH DRIVE	[M]
IC801	MN101C38ABB	IC MICON	[M]
IC802	S-80733ANY-Z	IC RESET	[M]
IC951	0N2180RLC1	PHOTO INTERUPTOR	[M]
IC1301	C1AA00000612	IC ANALOG SW	[M]
IC1302	AN7317	IC PLAYBACK/RECORD	[M]
		TRANSISTORS	
Q1	KTC3199GRTA	TRANSISTOR	[M]
Q101	2SC1740SLNRT	TRANSISTOR	[M]
Q102	2SC1740SLNRT	TRANSISTOR	[M]
Q103	2SD1450RSTA	TRANSISTOR	[M]
Q201	2SC1740SLNRT	TRANSISTOR	[M]
Q202	2SC1740SLNRT	TRANSISTOR	[M]
Q203	2SD1450RSTA	TRANSISTOR	[M]
Q301	2SC1741ASTPR	TRANSISTOR	[M] ⚠
Q302	B1GACFNN0007	TRANSISTOR	[M]
Q303	2SA854STPQ	TRANSISTOR	[M]
Q304	KTC3199GRTA	TRANSISTOR	[M]
Q305	B1ACND000003	TRANSISTOR	[M]
Q306	RVTDTC114YST	TRANSISTOR	[M]
Q307	KTA1267GRTA	TRANSISTOR	[M]
Q308	KTA1046	TRANSISTOR	[M]
Q309	KTC3199GRTA	TRANSISTOR	[M]
Q310	2SA1515STPQ	TRANSISTOR	[M]
Q311	KTC3199GRTA	TRANSISTOR	[M]
Q312	2SA1515STPQ	TRANSISTOR	[M]
Q313	KTC3199GRTA	TRANSISTOR	[M]
Q314	2SA854STPQ	TRANSISTOR	[M]
Q315	B1GACFNN0007	TRANSISTOR	[M]
Q318	KTC3199GRTA	TRANSISTOR	[M]
Q401	B1DEDQ000004	TRANSISTOR	[M]
Q404	KTC3199GRTA	TRANSISTOR	[M]
Q551	B1GACFNN0007	TRANSISTOR	[M]
Q701	2SA1037AKSTX	TRANSISTOR	[M]
Q801	KTC3199GRTA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q802	KTC3199GRTA	TRANSISTOR	[M]
Q805	RVTDTC143XST	TRANSISTOR	[M]
Q806	RVTDTC143XST	TRANSISTOR	[M]
Q807	RVTDTC143XST	TRANSISTOR	[M]
Q808	B1GCCFGH0002	TRANSISTOR	[M]
Q809	RVTDTC143XST	TRANSISTOR	[M]
Q1000	RVTDTC143XST	TRANSISTOR	[M]
Q1101	B1DEDQ000004	TRANSISTOR	[M]
Q1102	KTC3199GRTA	TRANSISTOR	[M]
Q1103	B1DEDQ000004	TRANSISTOR	[M]
Q1104	B1DEDQ000004	TRANSISTOR	[M]
Q1201	B1DEDQ000004	TRANSISTOR	[M]
Q1202	KTC3199GRTA	TRANSISTOR	[M]
Q1203	B1DEDQ000004	TRANSISTOR	[M]
Q1204	B1DEDQ000004	TRANSISTOR	[M]
Q1301	KTC3199GRTA	TRANSISTOR	[M]
Q1303	KTC3199GRTA	TRANSISTOR	[M]
Q1400	RVTDTC114EST	TRANSISTOR	[M]
Q1401	B1GCCFGH0002	TRANSISTOR	[M]
Q1402	RVTDTC143XST	TRANSISTOR	[M]
Q1451	RVTDTC143TST	TRANSISTOR	[M]
Q1452	2SD2470TP	TRANSISTOR	[M]
Q1453	RVTDTC114EST	TRANSISTOR	[M]
Q1454	2SA854STPQ	TRANSISTOR	[M]
		DIODES	
D1	KV1520NT1-2	DIODE	[M]
D2	B0CBBB000004	DIODE	[M]
D3	B0CBBB000004	DIODE	[M]
D101	B0BA7R500006	DIODE	[M]
D201	B0BA7R500006	DIODE	[M]
D301	B0BA01100004	DIODE	[M]
D302	B0AACK000004	DIODE	[M]
D303	B0AACK000004	DIODE	[M]
D304	B0AACK000004	DIODE	[M]
D305	B0BA5R000004	DIODE	[M]
D306	B0AACK000004	DIODE	[M]
D307	B0BA8R700009	DIODE	[M]
D308	B0AACK000004	DIODE	[M]
D309	1SR35400V	DIODE	[M]
D310	1SR35400V	DIODE	[M]
D311	B0AACK000004	DIODE	[M]
D312	B0AACK000004	DIODE	[M]
D313	B0AACK000004	DIODE	[M]
D314	B0AACK000004	DIODE	[M]
D315	B0AACK000004	DIODE	[M]
D404	B0AACK000004	DIODE	[M]
D501	1SR35400V	DIODE	[M]
D502	1SR35400V	DIODE	[M]
D503	1SR35400V	DIODE	[M]
D504	1SR35400V	DIODE	[M]
D551	B3AGA0000026	DIODE	[M]
D750	MAZ80560ML	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D801	B0AACK000004	DIODE	[M]
D802	B0AACK000004	DIODE	[M]
D803	B0AACK000004	DIODE	[M]
D951	MA165TA	DIODE	[M]
D1500	B0BA6R100003	DIODE	[M]
		SWITCHES	
S601	EVQ21405RJ	SW FF	[M]
S602	EVQ21405RJ	SW REW	[M]
S603	EVQ21405RJ	SW TAPE/CD STOP	[M]
S604	EVQ21405RJ	SW POWER	[M]
S605	EVQ21405RJ	SW GEQ	[M]
S606	EVQ21405RJ	SW VOLUME -	[M]
S607	EVQ21405RJ	SW VOLUME +	[M]
S621	EVQ21405RJ	SW CD OPEN/CLOSE	[M]
S622	EVQ21405RJ	SW MEMORY	[M]
S623	EVQ21405RJ	SW CLOCK/TIMER	[M]
S624	EVQ21405RJ	SW TIMER PLAY/REC	[M]
S625	EVQ21405RJ	SW CD REC MODE	[M]
S626	EVQ21405RJ	SW CD PLAY/PAUSE	[M]
S627	EVQ21405RJ	SW TUNER BAND	[M]
S628	EVQ21405RJ	SW TAPE PLAY	[M]
S629	EVQ21405RJ	SW PAUSE/PLAY	[M]
S630	EVQ21405RJ	SW DECK EJECT	[M]
S701	RSH1A048-A	RESET SWITCH	[M]
S780	RSH1A049-U	OPEN SWITCH	[M]
S951	RSH1A018-3U	MODE SWITCH	[M]
S952	RSH1A019-2U	LEAF SWITCH	[M]
S954	RSH1A019-2U	LEAF SWITCH	[M]
		CONNECTORS	
CN701	RJS2A8616	16P FPC CONNECTOR	[M]
CN702	RJS1A9319	19P FFC CONNECTOR	[M]
CP501	RJP4G4YA	CONNECTOR	[M]
CP802	RJP2G18ZA	2P CONNECTOR	[M]
CP1301	RJS1A6804-J	4P CONNECTOR	[M]
CP1450	K1KA02A00228	MOTOR CONNECTOR	[M]
CP1902	K1KA09B00058	CONNECTOR	[M]
CS601	K1MP10A00003	10P WIRE HOLDER	[M]
CS801	RJS1A6819-J	19P FFC CONNECTOR	[M]
CS951	RJU071H09M1	CONNECTOR	[M]
		TRIMMER	
CT1	ECRLA010A53R	TRIMMER CAPACITOR	[M]
		COILS & TRANSFORMERS	
L2	RLQY30S1W	FM COIL	[M]
L3	RLV2C045-0	FERRITE ANTENNA	[M]
L4	RLD4Y45W	OSC COIL	[M]
L6	RL02B131-T	AM OSC COIL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L7	G0C101KA0029	AXIAL COIL	[M]
L8	RLQY30S1W	FM COIL	[M]
L501	RLL500050T-Y	RF CHOKE COIL	[M] ⚠
L502	RLL500050T-Y	RF CHOKE COIL	[M] ⚠
L801	G0C2R2KA0029	COIL	[M]
L802	G0C2R2KA0029	COIL	[M]
L811	G0C2R2KA0029	COIL	[M]
L823	G0C2R2KA0029	COIL	[M]
L831	G0C2R2KA0029	COIL	[M]
L1301	RL09B17-T	REC BIAS OSC COIL	[M]
T1	RLI2B015-T	AM IFT	[M]
T501	RTP1U1B010-V	TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z601	RRV12E12404A	AI JOG	[M]
Z801	A2ZZ00000034	LCD	[M]
Z861	RCDRPM6937H4	REMOTE SENSOR	[M]
		CERAMIC FILTERS	
CF1	J0B1075A0081	FM CF	[M]
CF3	J0B1075A0051	FM DISCRIMINATOR	[M]
CF4	RLFCFA459L4B	AM FILTER	[M]
		OSCILLATORS	
X2	RSXZ456KZ02	CERAMIC OSCILLATOR	[M]
X3	RSXD7M20C01	CRYSTAL OSCILLATOR	[M]
X701	RSXZ16M9M06	CERAMIC OSCILLATOR	[M]
X801	RSXZ6M00D01T	RESONATOR	[M]
X802	RSXD32K7S02	CRYSTAL OSCILLATOR	[M]
		FUSES	
F501	XBA2C20TB0	FUSE	[M] ⚠
		FUSE HOLDERS	
FH501	EYF52BC	FUSE HOLDER	[M]
FH502	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTOR	
FP301	K5G202A00025	PROTECTOR	[M] ⚠
FP501	RSFMB40KT-L	FUSE PROTECTOR	[M] ⚠
		HOLDERS	
H501	K1YF04000001	CABLE HOLDER	[M]
H502	K1YF04000001	CABLE HOLDER	[M]
H601	RMR0319	10P CABLE HOLDER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		JACKS	
JK301	K2HC103B0049	JK HEAD PHONE	[M]
JK501	RJJ1SE01-1H	JK AC INLET (SW501)	[M] ⚠
		WIRES	
W501	REXX0214	MAIN TO POWER WIRE	[M]
W502	RWJ0104170SQ	POWER TO BATTERY WIR	[M]
W601	RWJ1110150XX	WIRE	[M]
W602	RWJ4202205KX	MAIN TO SP.RIGHT	[M]
W603	RWJ6902170KX	MAIN TO SP.LEFT	[M]
W801	RWJ0103080SS	STANDBY WIRE	[M]
W802	RWJ8303110SS	REMOTE CONTROL SENSO	[M]
		RESISTORS	
R2	ERDS2TJ103T	10K 1/4W	[M]
R3	ERDS2TJ332T	3.3K 1/4W	[M]
R4	ERDS2TJ472T	4.7K 1/4W	[M]
R5	ERDS2TJ221T	220 1/4W	[M]
R6	ERDS2TJ104T	100K 1/4W	[M]
R8	ERDS2TJ104T	100K 1/4W	[M]
R9	ERDS2TJ104T	100K 1/4W	[M]
R11	ERDS2TJ223T	22K 1/4W	[M]
R12	ERDS2TJ103T	10K 1/4W	[M]
R13	ERDS2TJ474T	470K 1/4W	[M]
R14	ERDS2TJ474T	470K 1/4W	[M]
R16	ERDS2TJ104T	100K 1/4W	[M]
R17	ERDS2TJ222T	2.2K 1/4W	[M]
R20	ERDS2TJ223T	22K 1/4W	[M]
R21	ERDS2TJ123T	12K 1/4W	[M]
R22	ERDS2TJ102T	1K 1/4W	[M]
R23	ERDS2TJ223T	22K 1/4W	[M]
R24	ERDS2TJ103T	10K 1/4W	[M]
R25	ERDS2TJ223T	22K 1/4W	[M]
R26	ERDS2TJ103T	10K 1/4W	[M]
R27	ERDS2TJ332T	3.3K 1/4W	[M]
R28	ERDS2TJ223T	22K 1/4W	[M]
R29	ERDS2TJ103T	10K 1/4W	[M]
R30	ERDS2TJ472T	4.7K 1/4W	[M]
R31	ERDS2TJ222T	2.2K 1/4W	[M]
R32	ERDS2TJ331T	330 1/4W	[M]
R91	ERDS2TJ330T	33 1/4W	[M]
R92	ERDS2TJ182T	1.8K 1/4W	[M]
R101	ERDS2TJ222T	2.2K 1/4W	[M]
R102	ERDS2TJ682T	6.8K 1/4W	[M]
R103	ERDS2TJ183T	18K 1/4W	[M]
R104	ERDS2TJ152T	1.5K 1/4W	[M]
R105	ERDS2TJ152T	1.5K 1/4W	[M]
R106	ERDS2TJ122T	1.2K 1/4W	[M]
R108	ERDS2TJ102T	1K 1/4W	[M]
R109	ERDS2TJ473T	47K 1/4W	[M]
R110	ERDS2TJ105T	1M 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R111	ERDS2TJ103T	10K 1/4W	[M]
R112	ERDS2TJ822T	8.2K 1/4W	[M]
R113	ERDS2TJ682T	6.8K 1/4W	[M]
R115	ERDS2TJ222T	2.2K 1/4W	[M]
R116	ERDS2TJ221T	220 1/4W	[M]
R117	ERDS2TJ181T	180 1/4W	[M]
R118	ERDS2TJ103T	10K 1/4W	[M]
R119	ERDS2TJ562T	5.6K 1/4W	[M]
R120	ERDS2TJ681T	680 1/4W	[M]
R121	ERDS2TJ472T	4.7K 1/4W	[M]
R122	ERDS2TJ471T	470 1/4W	[M]
R123	ERDS2TJ683T	68K 1/4W	[M]
R124	ERDS2TJ682T	6.8K 1/4W	[M]
R201	ERDS2TJ222T	2.2K 1/4W	[M]
R202	ERDS2TJ682T	6.8K 1/4W	[M]
R203	ERDS2TJ183T	18K 1/4W	[M]
R204	ERDS2TJ152T	1.5K 1/4W	[M]
R205	ERDS2TJ152T	1.5K 1/4W	[M]
R206	ERDS2TJ122T	1.2K 1/4W	[M]
R208	ERDS2TJ102T	1K 1/4W	[M]
R209	ERDS2TJ473T	47K 1/4W	[M]
R210	ERDS2TJ105T	1M 1/4W	[M]
R211	ERDS2TJ103T	10K 1/4W	[M]
R212	ERDS2TJ822T	8.2K 1/4W	[M]
R213	ERDS2TJ682T	6.8K 1/4W	[M]
R215	ERDS2TJ222T	2.2K 1/4W	[M]
R216	ERDS2TJ221T	220 1/4W	[M]
R217	ERDS2TJ181T	180 1/4W	[M]
R218	ERDS2TJ103T	10K 1/4W	[M]
R219	ERDS2TJ562T	5.6K 1/4W	[M]
R220	ERDS2TJ681T	680 1/4W	[M]
R221	ERDS2TJ472T	4.7K 1/4W	[M]
R222	ERDS2TJ471T	470 1/4W	[M]
R223	ERDS2TJ683T	68K 1/4W	[M]
R224	ERDS2TJ682T	6.8K 1/4W	[M]
R301	ERDS2TJ333T	33K 1/4W	[M]
R302	ERDS2TJ272T	2.7K 1/4W	[M]
R303	ERDS2TJ102T	1K 1/4W	[M]
R304	ERD2FCVJ4R7T	4.7 1/4W	[M]
R305	ERDS2TJ222T	2.2K 1/4W	[M]
R306	ERDS2TJ101T	100 1/4W	[M]
R307	ERDS2TJ103T	10K 1/4W	[M]
R308	ERDS2TJ103T	10K 1/4W	[M]
R309	ERDS2TJ472T	4.7K 1/4W	[M]
R310	ERDS2TJ102T	1K 1/4W	[M]
R311	ERDS2TJ102T	1K 1/4W	[M]
R312	ERDS2TJ474T	470K 1/4W	[M]
R313	ERDS2TJ393T	39K 1/4W	[M]
R314	ERDS2TJ103T	10K 1/4W	[M]
R315	ERDS2TJ471T	470 1/4W	[M]
R316	ERDS2TJ471T	470 1/4W	[M]
R317	ERDS2TJ471T	470 1/4W	[M]
R318	ERDS2TJ471T	470 1/4W	[M]
R319	ERDS2TJ223T	22K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R320	ERDS2TJ223T	22K 1/4W	[M]
R321	ERDS2TJ153T	15K 1/4W	[M]
R322	ERDS2TJ1R5T	1.5 1/4W	[M]
R323	ERDS2TJ1R5T	1.5 1/4W	[M]
R324	ERDS2TJ1R5T	1.5 1/4W	[M]
R325	ERDS2TJ471T	470 1/4W	[M]
R326	ERDS2TJ471T	470 1/4W	[M]
R327	ERDS2TJ101T	100 1/4W	[M]
R328	ERDS2TJ331T	330 1/4W	[M]
R329	ERDS2TJ474T	470K 1/4W	[M]
R330	ERDS2TJ103T	10K 1/4W	[M]
R331	ERDS2TJ331T	330 1/4W	[M]
R332	ERDS2TJ331T	330 1/4W	[M]
R333	ERDS2TJ183T	18K 1/4W	[M]
R334	ERDS2TJ152T	1.5K 1/4W	[M]
R335	ERDS2TJ103T	10K 1/4W	[M]
R336	ERDS2TJ472T	4.7K 1/4W	[M]
R337	ERDS2TJ103T	10K 1/4W	[M]
R338	ERDS2TJ102T	1K 1/4W	[M]
R342	ERDS2TJ102T	1K 1/4W	[M]
R401	ERDS2TJ102T	1K 1/4W	[M]
R402	ERDS2TJ102T	1K 1/4W	[M]
R405	ERDS2TJ330T	33 1/4W	[M]
R406	ERDS2TJ330T	33 1/4W	[M]
R408	ERDS2TJ472T	4.7K 1/4W	[M]
R409	ERDS2TJ335T	3.3M 1/4W	[M]
R418	ERDS2TJ105T	1M 1/4W	[M]
R419	ERDS2TJ103T	10K 1/4W	[M]
R501	ERDS2TJ271T	270 1/4W	[M]
R551	ERDS2TJ151T	150 1/4W	[M]
R552	ERDS2TJ821T	820 1/4W	[M]
R553	ERDS2TJ151T	150 1/4W	[M]
R554	ERDS2TJ151T	150 1/4W	[M]
R555	ERDS2TJ151T	150 1/4W	[M]
R601	ERDS2TJ102T	1K 1/4W	[M]
R602	ERDS2TJ102T	1K 1/4W	[M]
R603	ERDS2TJ122T	1.2K 1/4W	[M]
R604	ERDS2TJ182T	1.8K 1/4W	[M]
R605	ERDS2TJ222T	2.2K 1/4W	[M]
R606	ERDS2TJ272T	2.7K 1/4W	[M]
R607	ERDS2TJ472T	4.7K 1/4W	[M]
R621	ERDS2TJ102T	1K 1/4W	[M]
R622	ERDS2TJ102T	1K 1/4W	[M]
R623	ERDS2TJ122T	1.2K 1/4W	[M]
R624	ERDS2TJ182T	1.8K 1/4W	[M]
R625	ERDS2TJ222T	2.2K 1/4W	[M]
R626	ERDS2TJ272T	2.7K 1/4W	[M]
R627	ERDS2TJ472T	4.7K 1/4W	[M]
R628	ERDS2TJ682T	6.8K 1/4W	[M]
R629	ERDS2TJ103T	10K 1/4W	[M]
R630	ERDS2TJ223T	22K 1/4W	[M]
R701	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R702	ERJ3GEYJ103V	10K 1/16W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R705	ERJ3GEYJ154V	150K 1/16W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]
R707	ERJ3GEYJ393V	39K 1/16W	[M]
R708	ERJ3GEYJ223V	22K 1/16W	[M]
R709	ERJ3GEYJ473V	47K 1/16W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	ERJ3GEYJ221V	220 1/16W	[M]
R714	ERJ3GEY0R00V	0 1/16W	[M]
R715	ERJ3GEYJ102V	1K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R721	ERJ3GEYJ101V	100 1/16W	[M]
R723	ERJ3GEYJ103V	10K 1/16W	[M]
R724	ERJ3GEYJ153V	15K 1/16W	[M]
R725	ERJ3GEYJ681V	680 1/16W	[M]
R727	ERJ3GEYJ272V	2.7K 1/16W	[M]
R728	ERJ3GEYJ222V	2.2K 1/16W	[M]
R729	ERJ3GEYJ272V	2.7K 1/16W	[M]
R731	ERJ3GEYJ103V	10K 1/16W	[M]
R732	ERJ3GEYJ102V	1K 1/16W	[M]
R735	ERJ3GEYJ101V	100 1/16W	[M]
R736	ERJ3GEYJ101V	100 1/16W	[M]
R741	ERJ3GEYJ473V	47K 1/16W	[M]
R742	ERJ3GEYJ224V	220K 1/16W	[M]
R744	ERJ3GEYJ124V	120K 1/16W	[M]
R749	ERJ3GEYJ272V	2.7K 1/16W	[M]
R753	ERJ3GEYJ100V	10 1/16W	[M]
R754	ERJ3GEYJ5R6V	5.6 1/16W	[M]
R761	ERJ3GEYJ472V	4.7K 1/16W	[M]
R801	ERDS2TJ154T	150K 1/4W	[M]
R802	ERDS2TJ154T	150K 1/4W	[M]
R803	ERDS2TJ154T	150K 1/4W	[M]
R806	ERDS2TJ332T	3.3K 1/4W	[M]
R807	ERDS2TJ332T	3.3K 1/4W	[M]
R808	ERDS2TJ102T	1K 1/4W	[M]
R809	ERDS2TJ105T	1M 1/4W	[M]
R810	ERDS2TJ334T	330K 1/4W	[M]
R811	ERDS2TJ104T	100K 1/4W	[M]
R815	ERDS2TJ102T	1K 1/4W	[M]
R816	ERDS2TJ102T	1K 1/4W	[M]
R817	ERDS2TJ103T	10K 1/4W	[M]
R818	ERDS2TJ103T	10K 1/4W	[M]
R819	ERDS2TJ104T	100K 1/4W	[M]
R820	ERDS2TJ104T	100K 1/4W	[M]
R821	ERDS2TJ104T	100K 1/4W	[M]
R822	ERDS2TJ104T	100K 1/4W	[M]
R823	ERDS2TJ471T	470 1/4W	[M]
R825	ERDS2TJ102T	1K 1/4W	[M]
R826	ERDS2TJ102T	1K 1/4W	[M]
R827	ERDS2TJ102T	1K 1/4W	[M]
R828	ERDS2TJ102T	1K 1/4W	[M]
R829	ERDS2TJ102T	1K 1/4W	[M]
R830	ERDS2TJ474T	470K 1/4W	[M]
R831	ERDS2TJ472T	4.7K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R832	ERDS2TJ103T	10K 1/4W	[M]
R833	ERDS2TJ103T	10K 1/4W	[M]
R841	ERDS2TJ103T	10K 1/4W	[M]
R842	ERDS2TJ102T	1K 1/4W	[M]
R848	ERDS2TJ104T	100K 1/4W	[M]
R849	ERDS2TJ104T	100K 1/4W	[M]
R850	ERDS2TJ104T	100K 1/4W	[M]
R855	ERDS2TJ472T	4.7K 1/4W	[M]
R856	ERDS2TJ472T	4.7K 1/4W	[M]
R875	ERDS2TJ102T	1K 1/4W	[M]
R876	ERDS2TJ103T	10K 1/4W	[M]
R877	ERDS2TJ103T	10K 1/4W	[M]
R878	ERDS2TJ103T	10K 1/4W	[M]
R879	ERDS2TJ103T	10K 1/4W	[M]
R880	ERDS2TJ472T	4.7K 1/4W	[M]
R881	ERDS2TJ472T	4.7K 1/4W	[M]
R882	ERDS2TJ472T	4.7K 1/4W	[M]
R883	ERDS2TJ472T	4.7K 1/4W	[M]
R884	ERDS2TJ472T	4.7K 1/4W	[M]
R885	ERDS2TJ472T	4.7K 1/4W	[M]
R886	ERDS2TJ103T	10K 1/4W	[M]
R887	ERDS2TJ103T	10K 1/4W	[M]
R888	ERDS2TJ103T	10K 1/4W	[M]
R889	ERDS2TJ103T	10K 1/4W	[M]
R890	ERDS2TJ103T	10K 1/4W	[M]
R891	ERDS2TJ472T	4.7K 1/4W	[M]
R892	ERDS2TJ472T	4.7K 1/4W	[M]
R893	ERDS2TJ472T	4.7K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R1000	ERDS2TJ103T	10K 1/4W	[M]
R1001	ERDS2TJ683T	68K 1/4W	[M]
R1002	ERDS2TJ472T	4.7K 1/4W	[M]
R1101	ERDS2TJ223T	22K 1/4W	[M]
R1102	ERDS2TJ560T	56 1/4W	[M]
R1103	ERDS2TJ392T	3.9K 1/4W	[M]
R1104	ERDS2TJ102T	1K 1/4W	[M]
R1107	ERDS2TJ683T	68K 1/4W	[M]
R1108	ERDS2TJ392T	3.9K 1/4W	[M]
R1109	ERDS2TJ153T	15K 1/4W	[M]
R1110	ERDS2TJ474T	470K 1/4W	[M]
R1112	ERDS2TJ104T	100K 1/4W	[M]
R1201	ERDS2TJ223T	22K 1/4W	[M]
R1202	ERDS2TJ560T	56 1/4W	[M]
R1203	ERDS2TJ392T	3.9K 1/4W	[M]
R1204	ERDS2TJ102T	1K 1/4W	[M]
R1207	ERDS2TJ683T	68K 1/4W	[M]
R1208	ERDS2TJ392T	3.9K 1/4W	[M]
R1209	ERDS2TJ153T	15K 1/4W	[M]
R1210	ERDS2TJ474T	470K 1/4W	[M]
R1212	ERDS2TJ104T	100K 1/4W	[M]
R1299	ERDS2TJ333T	33K 1/4W	[M]
R1304	ERDS2TJ101T	100 1/4W	[M]
R1305	ERDS2TJ102T	1K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1310	ERDS2TJ102T	1K 1/4W	[M]
R1311	ERDS2TJ563T	56K 1/4W	[M]
R1313	ERDS2TJ221T	220 1/4W	[M]
R1314	ERDS2TJ100T	10 1/4W	[M]
R1340	ERDS2TJ223T	22K 1/4W	[M]
R1341	ERDS2TJ471T	470 1/4W	[M]
R1352	ERDS2TJ104T	100K 1/4W	[M]
R1353	ERDS2TJ474T	470K 1/4W	[M]
R1401	ERDS2TJ334T	330K 1/4W	[M]
R1404	ERDS2TJ472T	4.7K 1/4W	[M]
R1405	ERDS2TJ472T	4.7K 1/4W	[M]
R1406	ERDS2TJ472T	4.7K 1/4W	[M]
R1407	ERDS2TJ473T	47K 1/4W	[M]
R1408	ERDS2TJ473T	47K 1/4W	[M]
R1409	ERDS2TJ473T	47K 1/4W	[M]
R1410	ERDS2TJ223T	22K 1/4W	[M]
R1411	ERDS2TJ331T	330 1/4W	[M]
R1412	ERDS2TJ103T	10K 1/4W	[M]
R1413	ERDS2TJ223T	22K 1/4W	[M]
R1414	ERDS2TJ473T	47K 1/4W	[M]
R1451	ERDS2TJ331T	330 1/4W	[M]
R1452	ERDS2TJ102T	1K 1/4W	[M]
R1453	ERDS2TJ273T	27K 1/4W	[M]
R1501	ERDS2TJ101T	100 1/4W	[M]
R1502	ERDS2TJ475T	4.7M 1/4W	[M]
R1503	ERDS2TJ222T	2.2K 1/4W	[M]
		CAPACITORS	
C1	F1D1H470A006	47P 50V	[M]
C2	F1D1H100A015	10P 50V	[M]
C3	ECFR1C223KR	0.022 16V	[M]
C4	F1D1H102A012	1000P 50V	[M]
C5	F1D1H5R6A017	5.6P 50V	[M]
C6	F1D1H102A012	1000P 50V	[M]
C7	F1D1H120A015	12P 50V	[M]
C8	F1D1H102A012	1000P 50V	[M]
C9	F1D1H102A012	1000P 50V	[M]
C10	F1D1H100A015	10P 50V	[M]
C12	F1D1H331A012	330P 50V	[M]
C13	ECA1CAK100XB	10 16V	[M]
C14	F1D1H102A012	1000P 50V	[M]
C15	ECFR1C683KR	0.068 16V	[M]
C16	ECFR1C823MR	0.082 16V	[M]
C17	ECFR1C823MR	0.082 16V	[M]
C18	ECFR1C223KR	0.022 16V	[M]
C19	ECFR1C223KR	0.022 16V	[M]
C20	ECA1HAK010XB	1 50V	[M]
C21	ECA1HAK010XB	1 50V	[M]
C22	ECA1HAK4R7XB	4.7 50V	[M]
C23	ECFR1C333KR	0.033 16V	[M]
C24	ECFR1C333KR	0.033 16V	[M]
C30	F1D1H331A012	330P 50V	[M]
C31	F1D1C103A004	0.01 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C32	F1D1H102A012	1000P 50V	[M]
C33	F1D1H102A012	1000P 50V	[M]
C34	F1D1H102A012	1000P 50V	[M]
C35	ECA1CAK101XB	100 16V	[M]
C36	ECA1CAK101XB	100 16V	[M]
C37	F1D1C103A004	0.01 16V	[M]
C39	F1D1H120A015	12P 50V	[M]
C40	ECBT1C222KR5	2200P 16V	[M]
C42	ECBT1H180JC5	18P 50V	[M]
C43	F1D1H101A012	100P 50V	[M]
C44	ECA1HAK2R2XB	2.2 50V	[M]
C45	F1D1H102A012	1000P 50V	[M]
C48	ECA1HAK010XB	1 50V	[M]
C49	F1D1H102A012	1000P 50V	[M]
C50	F1D1H102A012	1000P 50V	[M]
C51	ECA1HAK010XB	1 50V	[M]
C53	F1D1H102A012	1000P 50V	[M]
C54	F1D1H102A012	1000P 50V	[M]
C91	ECA1CAK220XB	22 16V	[M]
C92	F1D1H331A012	330P 50V	[M]
C98	F1D1H331A012	330P 50V	[M]
C99	F1D1H102A012	1000P 50V	[M]
C101	ECA1HAK010XB	1 50V	[M]
C102	ECA1HAK010XB	1 50V	[M]
C103	ECA1HAK010XB	1 50V	[M]
C104	ECA1HAK010XB	1 50V	[M]
C106	ECFR1C563KR	0.056 16V	[M]
C107	ECA1CAK100XB	10 16V	[M]
C108	F1D1H101A012	100P 50V	[M]
C109	ECA1HAK0R1XB	0.1 50V	[M]
C111	ECA1HAK010XB	1 50V	[M]
C112	ECBT1C222KR5	2200P 16V	[M]
C113	ECA1AAM222XE	2200 10V	[M]
C114	ECA1CAK470XB	47 16V	[M]
C115	ECA1HAK3R3XB	3.3 50V	[M]
C116	F1D1H333A012	0.033 50V	[M]
C117	ECA1HAKR33XB	0.33 50V	[M]
C118	F1D1H102A012	1000P 50V	[M]
C119	ECA1CAM331XB	330 16V	[M]
C120	ECFR1C223KR	0.022 16V	[M]
C121	ECFR1C153KR	0.015 16V	[M]
C122	F1D1H471A012	470P 50V	[M]
C123	ECBT1C332KR5	3300P 16V	[M]
C201	ECA1HAK010XB	1 50V	[M]
C202	ECA1HAK010XB	1 50V	[M]
C203	ECA1HAK010XB	1 50V	[M]
C204	ECA1HAK010XB	1 50V	[M]
C206	ECFR1C563KR	0.056 16V	[M]
C207	ECA1CAK100XB	10 16V	[M]
C208	F1D1H101A012	100P 50V	[M]
C209	ECA1HAK0R1XB	0.1 50V	[M]
C211	ECA1HAK010XB	1 50V	[M]
C212	ECBT1C222KR5	2200P 16V	[M]
C213	ECA1AAM222XE	2200 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C214	ECA1CAK470XB	47 16V	[M]
C215	ECA1HAK3R3XB	3.3 50V	[M]
C216	F1D1H333A012	0.033 50V	[M]
C217	ECA1HAKR33XB	0.33 50V	[M]
C218	F1D1H102A012	1000P 50V	[M]
C219	ECA1CAM331XB	330 16V	[M]
C220	ECFR1C223KR	0.022 16V	[M]
C221	ECFR1C153KR	0.015 16V	[M]
C222	F1D1H471A012	470P 50V	[M]
C223	ECBT1C332KR5	3300P 16V	[M]
C301	ECA1EAM332XE	3300 25V	[M]
C302	ECA1CAK101XB	100 16V	[M]
C303	ECA1CAK220XB	22 16V	[M]
C304	ECA1CAK220XB	22 16V	[M]
C305	F1D1H102A012	1000P 50V	[M]
C307	ECA1CAK101XB	100 16V	[M]
C308	F1D1H471A012	470P 50V	[M]
C309	ECA1CAK101XB	100 16V	[M]
C310	ECA1CAK101XB	100 16V	[M]
C312	F1D1H1040002	0.1 50V	[M]
C313	ECA1EAK470XB	47 25V	[M]
C314	F1D1H1040002	0.1 50V	[M]
C315	F1D1E103A001	0.01 25V	[M]
C316	ECA1HAK010XB	1 50V	[M]
C317	ECA1HAK010XB	1 50V	[M]
C401	ECA1CAK470XB	47 16V	[M]
C402	F1D1H223A012	0.022 50V	[M]
C411	ECA1CAK470XB	47 16V	[M]
C414	ECA1HAK010XB	1 50V	[M]
C420	F1D1H221A012	220P 50V	[M]
C422	F1D1H221A012	220P 50V	[M]
C423	F1D1H221A012	220P 50V	[M]
C501	ECKR1H103ZF5	0.01 50V	[M]
C502	ECKR1H103ZF5	0.01 50V	[M]
C503	ECKR1H103ZF5	0.01 50V	[M]
C504	ECKR1H103ZF5	0.01 50V	[M]
C601	F1D1H101A012	100P 50V	[M]
C602	F1D1H101A012	100P 50V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	ECUV1C104KBV	0.1 16V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]
C704	ECUV1C104KBV	0.1 16V	[M]
C706	ECJ1VB1H272K	2700P 50V	[M]
C707	ECJ1VB1E273K	0.027 25V	[M]
C710	ECUV1H121JCV	120P 50V	[M]
C711	ECUV1C104KBV	0.1 16V	[M]
C712	ECUV1C104KBV	0.1 16V	[M]
C713	ECUV1C104KBV	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C715	ECJ1VB1H272K	2700P 50V	[M]
C716	ECJ1VB1H821K	820P 50V	[M]
C717	ECUV1E104ZFV	0.1 25V	[M]
C718	ECUV1A224KBV	0.22 10V	[M]
C721	ECUV1H100JCV	10P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C722	ECUV1H100JCV	10P 50V	[M]
C723	ECEA1AKA221I	220 10V	[M]
C724	ECUV1C104KBV	0.1 16V	[M]
C725	ECJ1VB1H102K	1000P 50V	[M]
C726	ECJ1VB1H102K	1000P 50V	[M]
C727	ECA1HAK010XI	1 50V	[M]
C728	ECA1HAK010XI	1 50V	[M]
C730	ECUV1E104ZFV	0.1 25V	[M]
C731	ECA0JAK221XI	220 6.3V	[M]
C732	ECEA0JKA221I	220 6.3V	[M]
C733	ECUV1C104KBV	0.1 16V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	ECUV1E104ZFV	0.1 25V	[M]
C736	ECUV1E104ZFV	0.1 25V	[M]
C737	ECUV1E104ZFV	0.1 25V	[M]
C738	ECUV1C563KBV	0.056 16V	[M]
C739	ECUV1H222KBV	2200P 50V	[M]
C742	ECJ1VB1E273K	0.027 25V	[M]
C743	ECUV1E104ZFV	0.1 25V	[M]
C744	ECUV1H562KBV	5600P 50V	[M]
C745	ECUV1E104ZFV	0.1 25V	[M]
C747	ECUV1H181JCV	180P 50V	[M]
C749	ECUV1H222KBV	2200P 50V	[M]
C750	ECUV1C104KBV	0.1 16V	[M]
C751	ECUV1C104KBV	0.1 16V	[M]
C752	ECUV1H152KBV	1500P 50V	[M]
C753	ECUV1H471KBV	470P 50V	[M]
C754	ECUV1H471KBV	470P 50V	[M]
C769	ECUV1A224KBV	0.22 10V	[M]
C801	F1D1H1040002	0.1 50V	[M]
C802	ECA1CAK100XB	10 16V	[M]
C803	F1D1C103A004	0.01 16V	[M]
C807	F1D1H102A012	1000P 50V	[M]
C808	F1D1H102A012	1000P 50V	[M]
C809	F1D1H820A012	82P 50V	[M]
C810	F1D1H470A006	47P 50V	[M]
C811	F1D1H820A012	82P 50V	[M]
C812	F1D1H470A006	47P 50V	[M]
C813	ECBT1H180JC5	18P 50V	[M]
C814	ECBT1H220JC5	22P 50V	[M]
C815	ECA1HAK010XB	1 50V	[M]
C818	F1D1H561A012	560P 50V	[M]
C819	F1D1H561A012	560P 50V	[M]
C820	F1D1H561A012	560P 50V	[M]
C824	F1D1C103A004	0.01 16V	[M]
C831	F1D1H101A012	100P 50V	[M]
C832	F1D1H101A012	100P 50V	[M]
C833	F1D1H331A012	330P 50V	[M]
C834	F1D1H102A012	1000P 50V	[M]
C840	F1D1H102A012	1000P 50V	[M]
C841	F1D1H1040002	0.1 50V	[M]
C849	F1D1H221A012	220P 50V	[M]
C850	F1D1H221A012	220P 50V	[M]
C851	F1D1H102A012	1000P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C852	F1D1H102A012	1000P 50V	[M]
C853	F1D1H102A012	1000P 50V	[M]
C854	F1D1H101A012	100P 50V	[M]
C855	F1D1H101A012	100P 50V	[M]
C856	F1D1H101A012	100P 50V	[M]
C865	F1D1H561A012	560P 50V	[M]
C866	ECA1AAK470XB	47 10V	[M]
C868	F1D1C103A004	0.01 16V	[M]
C1001	ECA1CAK470XB	47 16V	[M]
C1101	F1D1H101A012	100P 50V	[M]
C1102	ECBT1C122KR5	1200P 16V	[M]
C1103	F1D1H101A012	100P 50V	[M]
C1104	F1C1C393A011	0.039 16V	[M]
C1105	ECA1CAK100XB	10 16V	[M]
C1106	ECA1CAK101XB	100 16V	[M]
C1107	ECA1HAK010XB	1 50V	[M]
C1108	F1D1H821A012	820P 50V	[M]
C1109	ECA1CAK100XB	10 16V	[M]
C1110	F1D1H821A012	820P 50V	[M]
C1201	F1D1H101A012	100P 50V	[M]
C1202	ECBT1C122KR5	1200P 16V	[M]
C1203	F1D1H101A012	100P 50V	[M]
C1204	F1C1C393A011	0.039 16V	[M]
C1205	ECA1CAK100XB	10 16V	[M]
C1206	ECA1CAK101XB	100 16V	[M]
C1207	ECA1HAK010XB	1 50V	[M]
C1208	F1D1H821A012	820P 50V	[M]
C1209	ECA1CAK100XB	10 16V	[M]
C1210	F1D1H821A012	820P 50V	[M]
C1301	F1D1C103A004	0.01 16V	[M]
C1304	F0A2A102A010	1000P 100V	[M]
C1305	F0A2A151A010	150P 100V	[M]
C1306	ECA1CAK101XB	100 16V	[M]
C1307	F1D1C822A004	8200P 16V	[M]
C1308	F1D1C103A004	0.01 16V	[M]
C1325	ECA1CAK101XB	100 16V	[M]
C1451	ECA1CAK101XB	100 16V	[M]
C1500	ECA1CAK101XB	100 16V	[M]
C1501	ECA1CAK220XB	22 16V	[M]
C1502	ECA1CAK100XB	10 16V	[M]
C1503	F1C1C473A011	0.047 16V	[M]
		CHIP JUMPER	
RJ701	ERJ3GEY0R00V	0 1/16W	[M]
RJ702	ERJ3GEY0R00V	0 1/16W	[M]
RJ703	ERJ3GEY0R00V	0 1/16W	[M]
RJ709	ERJ3GEY0R00V	0 1/16W	[M]
RJ710	ERJ3GEY0R00V	0 1/16W	[M]
RJ711	ERJ3GEY0R00V	0 1/16W	[M]
RJ712	ERJ3GEY0R00V	0 1/16W	[M]
RJ713	ERJ3GEY0R00V	0 1/16W	[M]
RJ714	ERJ3GEY0R00V	0 1/16W	[M]
RJ715	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
RJ716	ERJ3GEY0R00V	0 1/16W	[M]
RJ722	ERJ3GEY0R00V	0 1/16W	[M]
RJ723	ERJ3GEY0R00V	0 1/16W	[M]
RJ724	ERJ3GEY0R00V	0 1/16W	[M]
RJ726	ERJ3GEY0R00V	0 1/16W	[M]
RJ727	ERJ3GEY0R00V	0 1/16W	[M]
RJ728	ERJ3GEY0R00V	0 1/16W	[M]
RJ731	ERJ3GEY0R00V	0 1/16W	[M]
RJ732	ERJ3GEY0R00V	0 1/16W	[M]
RJ734	ERJ3GEY0R00V	0 1/16W	[M]
		REST JUMPER	
TJ701	EYF8CU	TEST JUMPER	[M]

18.5. Packing Materials & Accessories Parts List

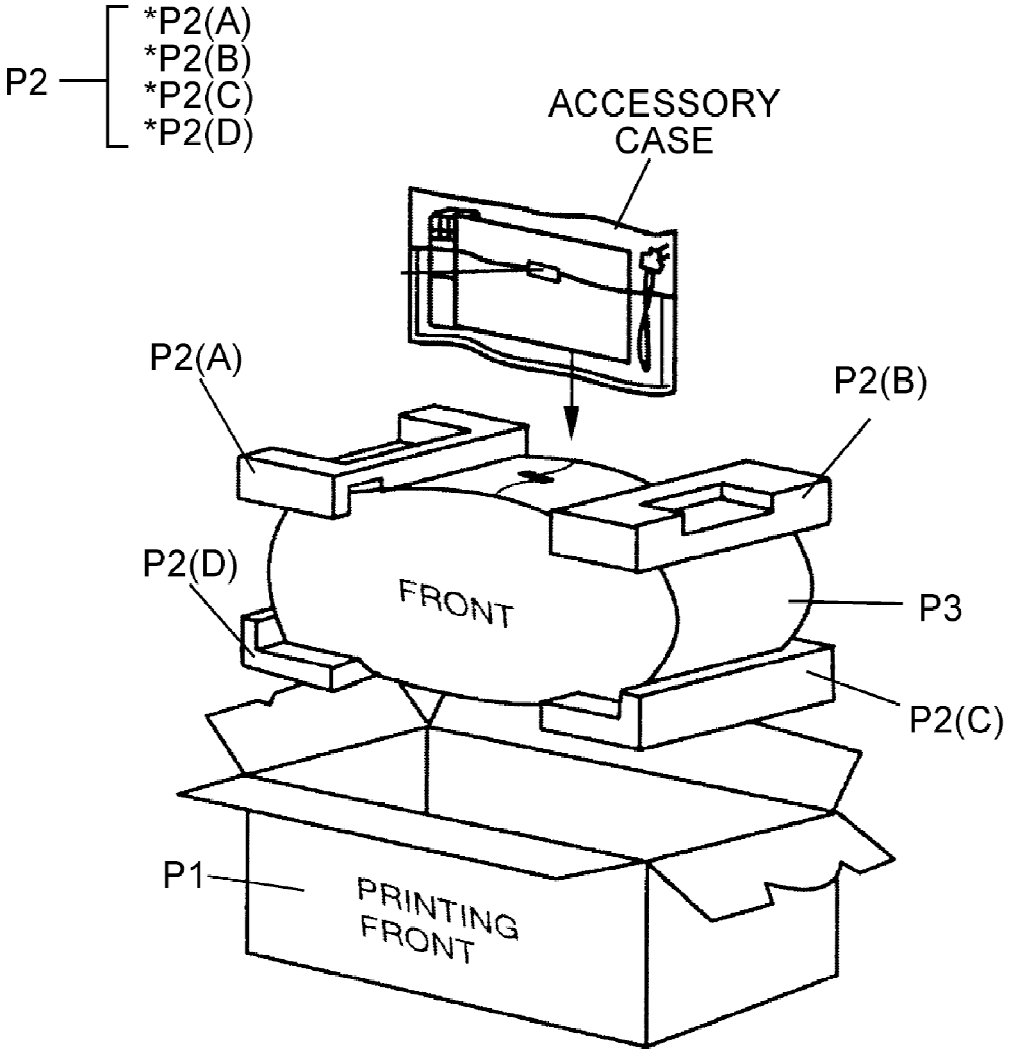
Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX0880	PACKING CASE	[M]EB EG
P1	RPGX0881	PACKING CASE	[M]E
P2	RPNX0111	POLYFOAM	[M]
P3	RPHX0018	MIRAMAT SHEET	[M]
		ACCESSORIES	
A1	EUR648251	REMOTE CONTROL	[M]
A1-1	UR64EC2337A	R/C BATTERY COVER	[M]
A2	RJA0019-2K	AC CORD (SF)	[M]EG E ⚠
A2	VJA0733	AC CORD (SF)	[M]EB ⚠
A3	RQT6275-E	O/I BOOK (Sp/Ru/Cz/Po)	[M]E
A3	RQT6276-D	O/I BOOK (Ge/It/Fr)	[M]EG
A3	RQT6277-H	O/I BOOK (Du/Da/Sw)	[M]EG
A3	RQT6278-B	O/I BOOK (En)	[M]EB E

18.6. Packaging

Accessory case

A2: AC Cord

A3: O/I Book



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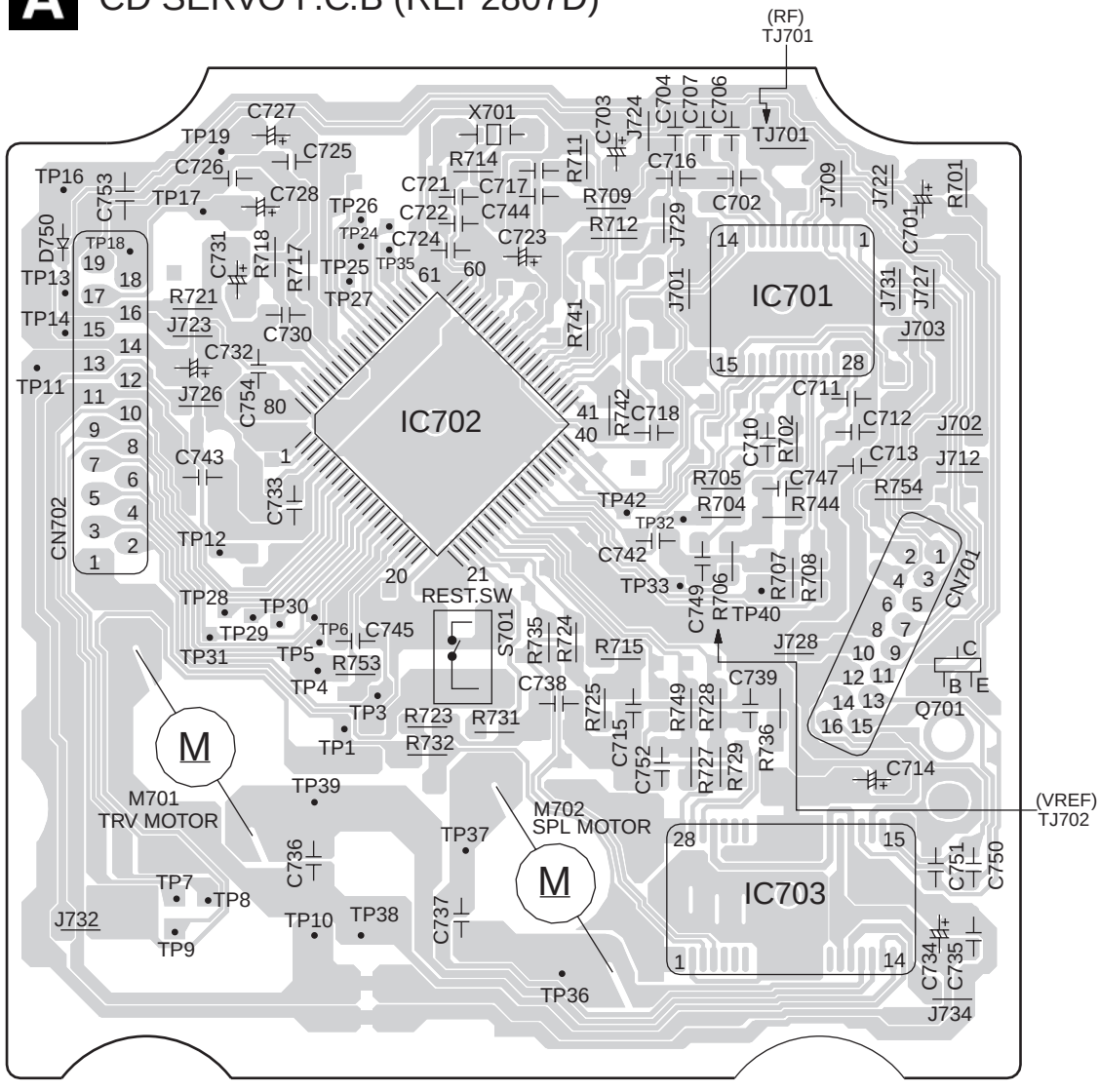
A CD SERVO P.C.B (REP2807D)

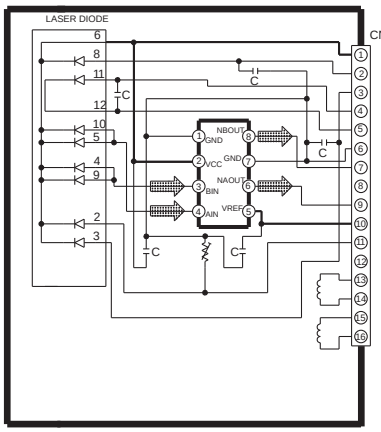


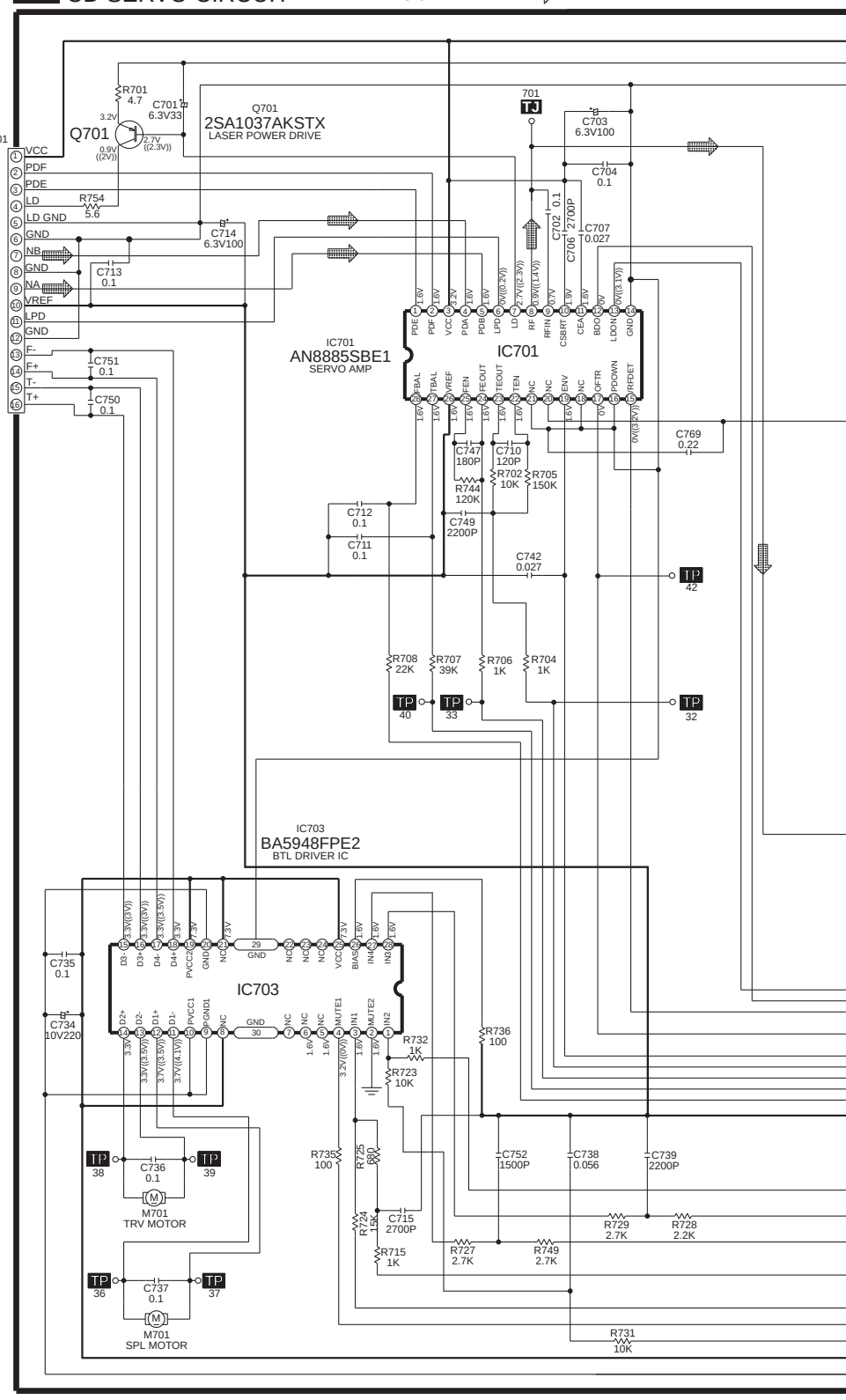
SCHEMATIC DIAGRAM -1

A CD SERVO CIRCUIT

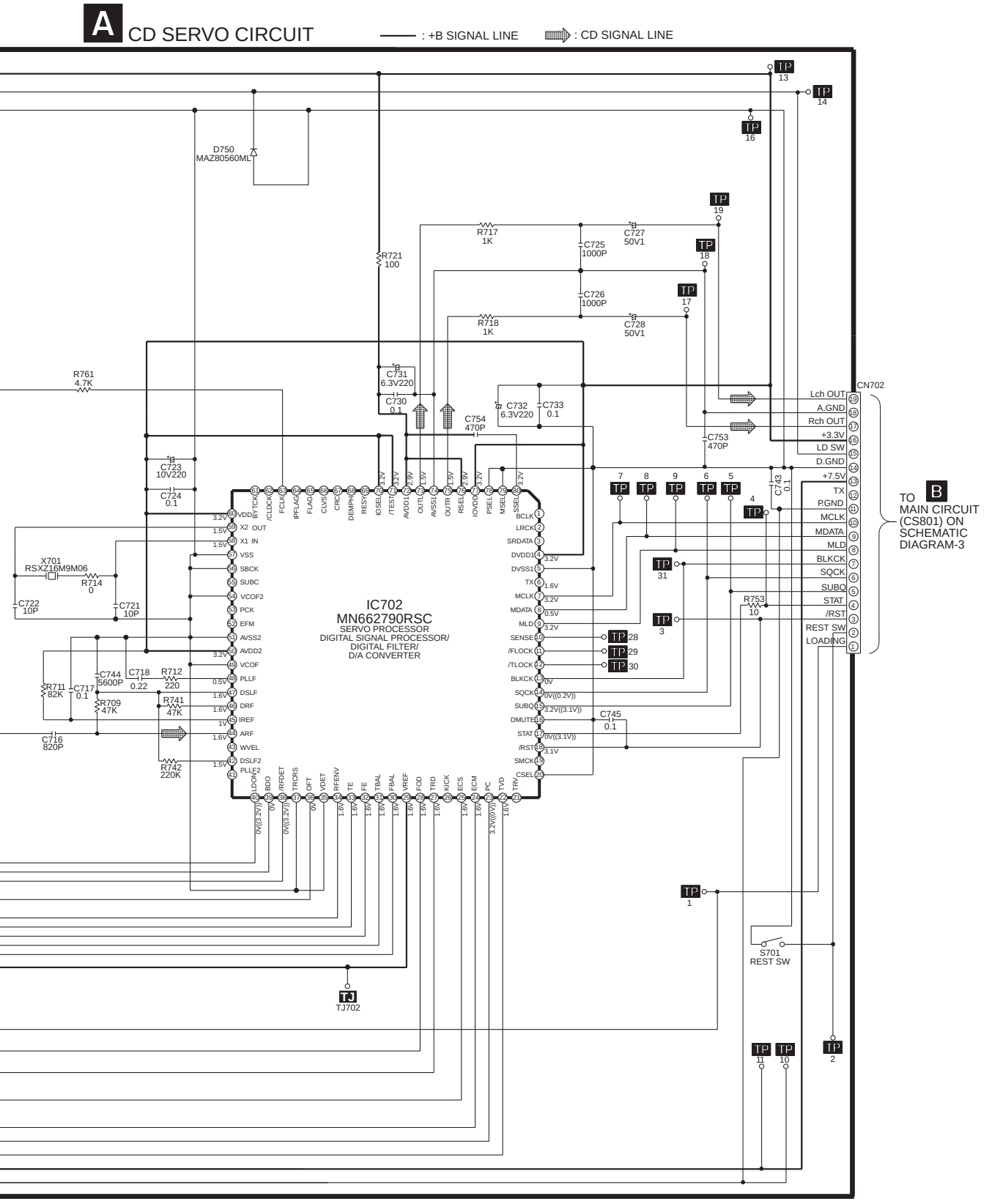
: +B SIGNAL LINE : CD SIGNAL LINE

OPTICAL PICKUP CIRCUIT

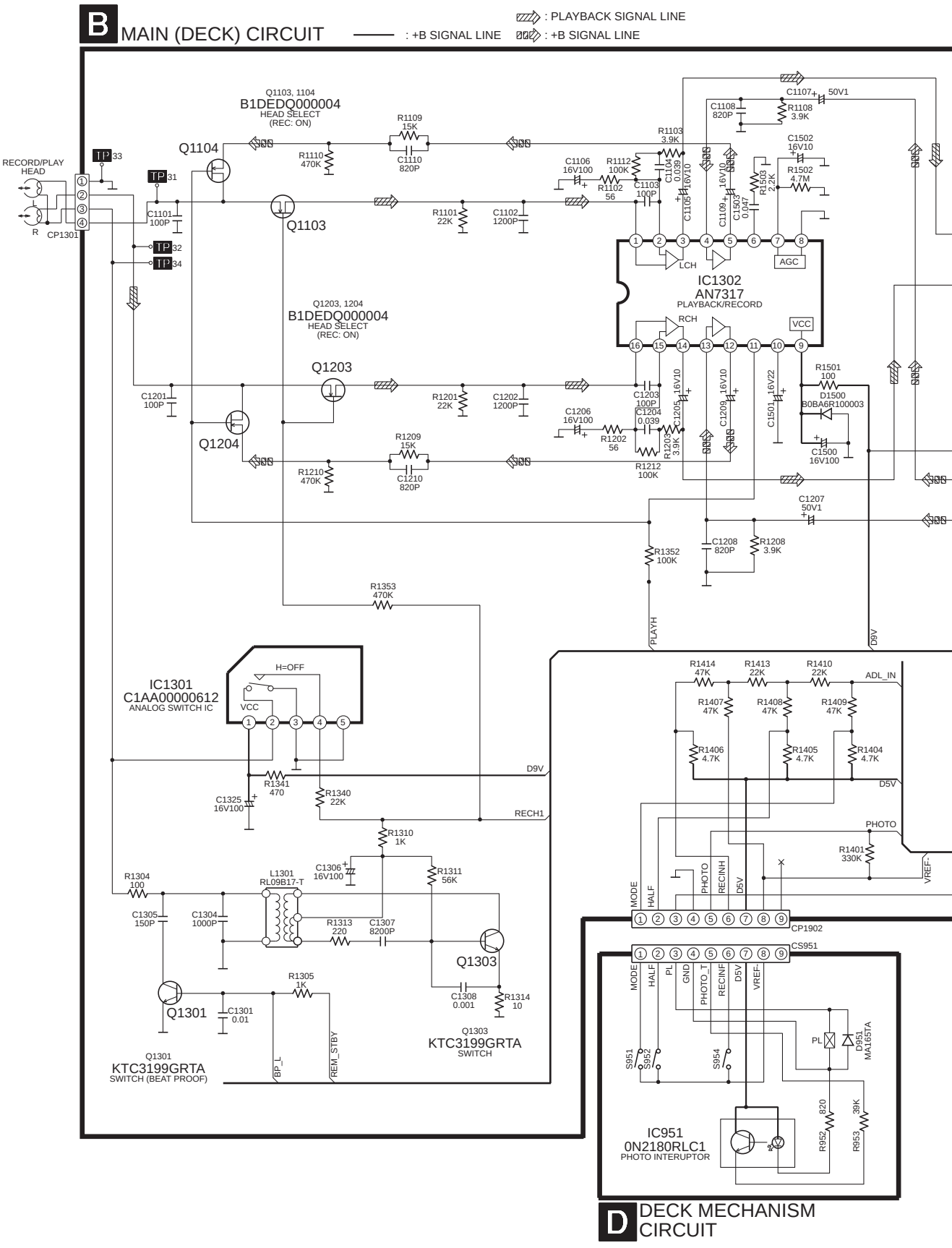




SCHEMATIC DIAGRAM - 2



SCHEMATIC DIAGRAM-6



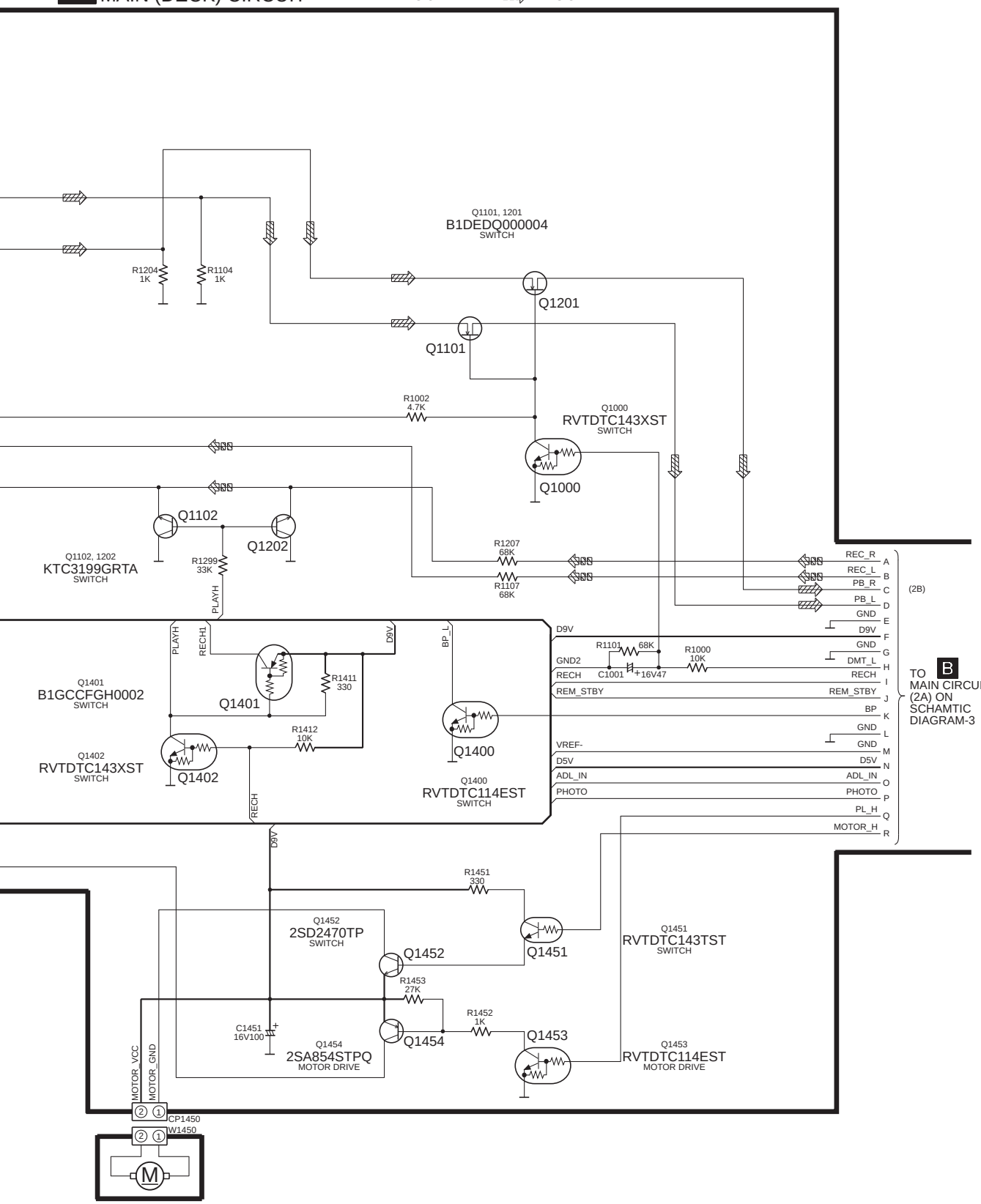
SCHEMATIC DIAGRAM-7

B MAIN (DECK) CIRCUIT

: +B SIGNAL LINE

: PLAYBACK SIGNAL LINE

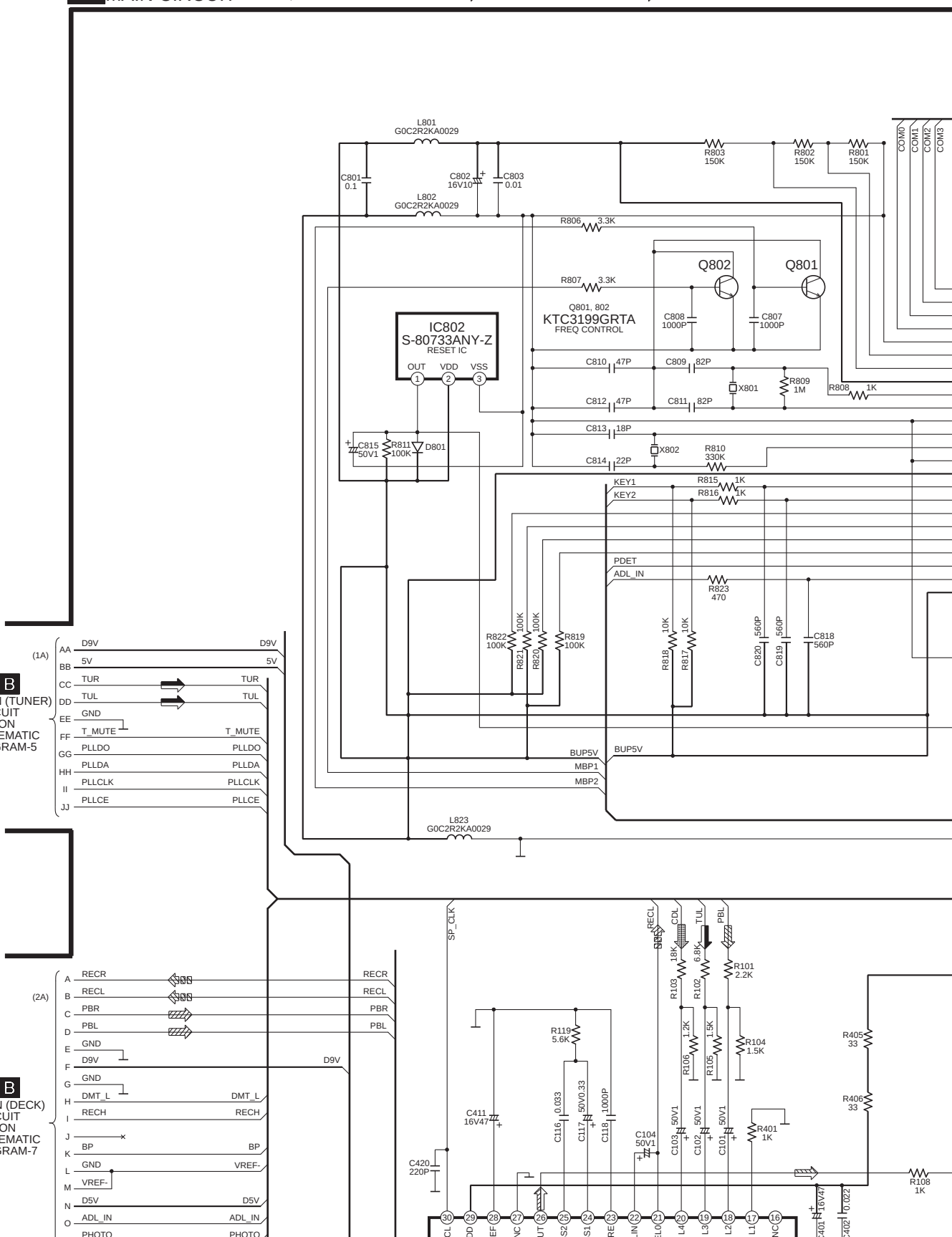
: +B SIGNAL LINE

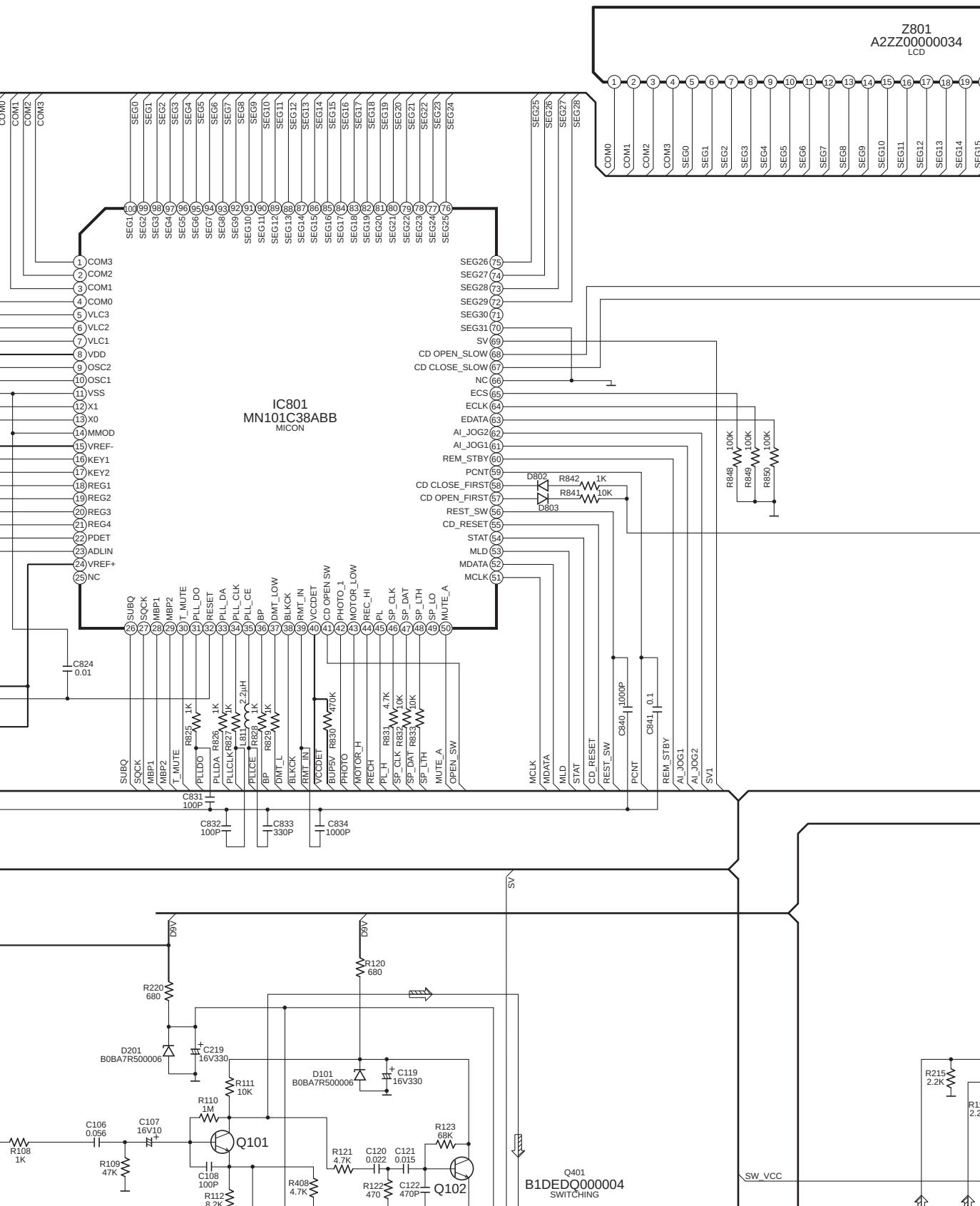


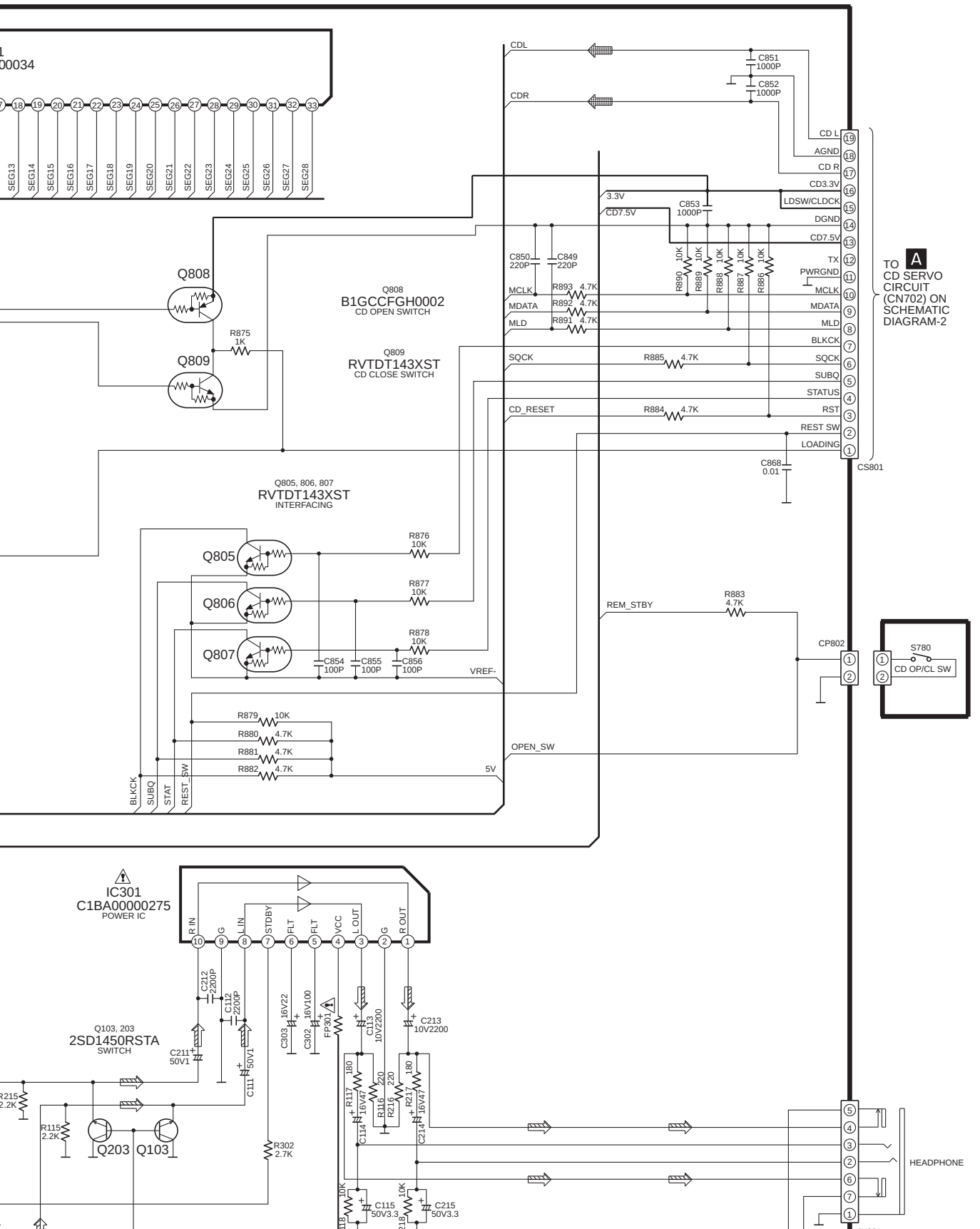
SCHEMATIC DIAGRAM-3

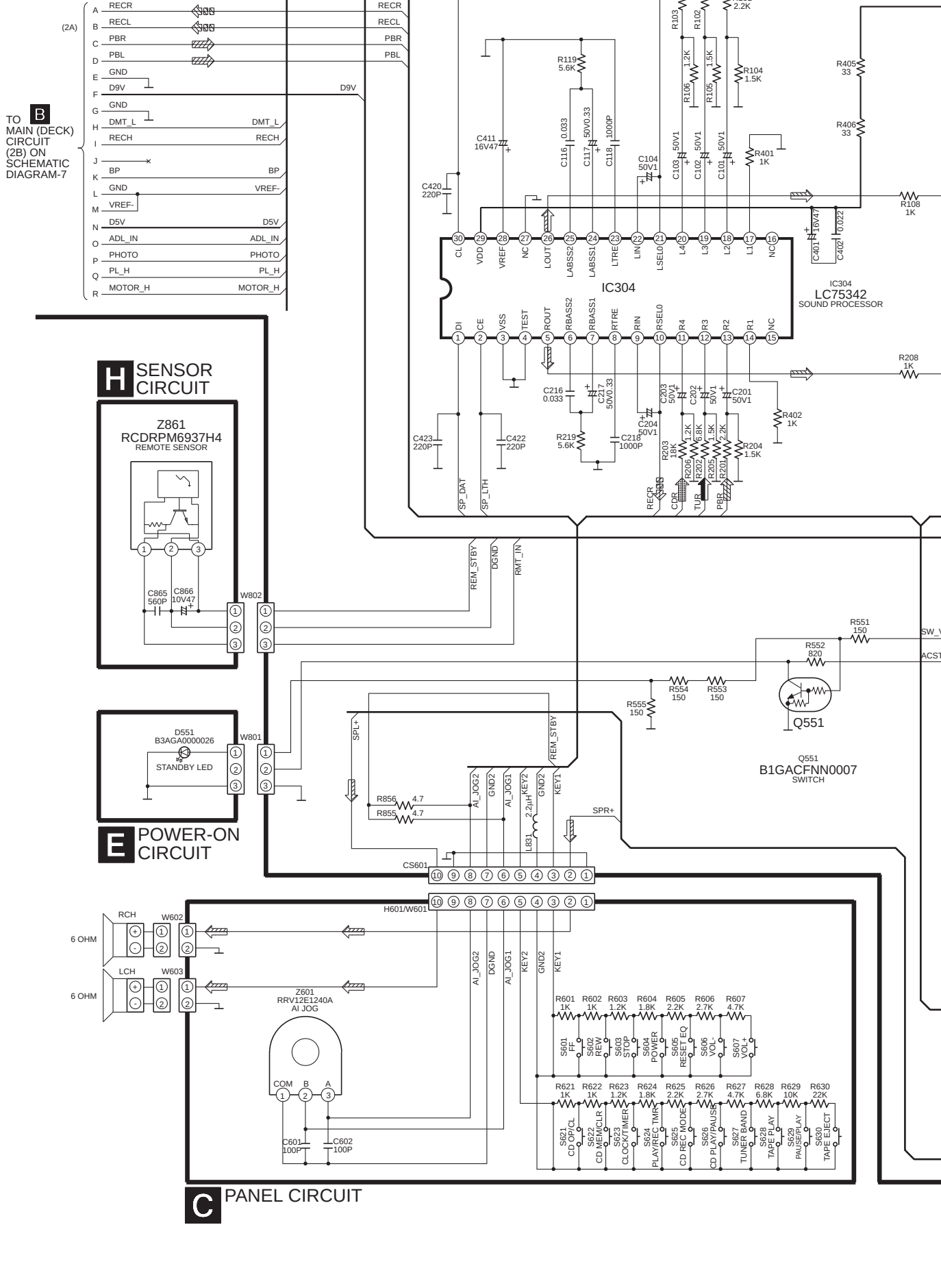
B MAIN CIRCUIT

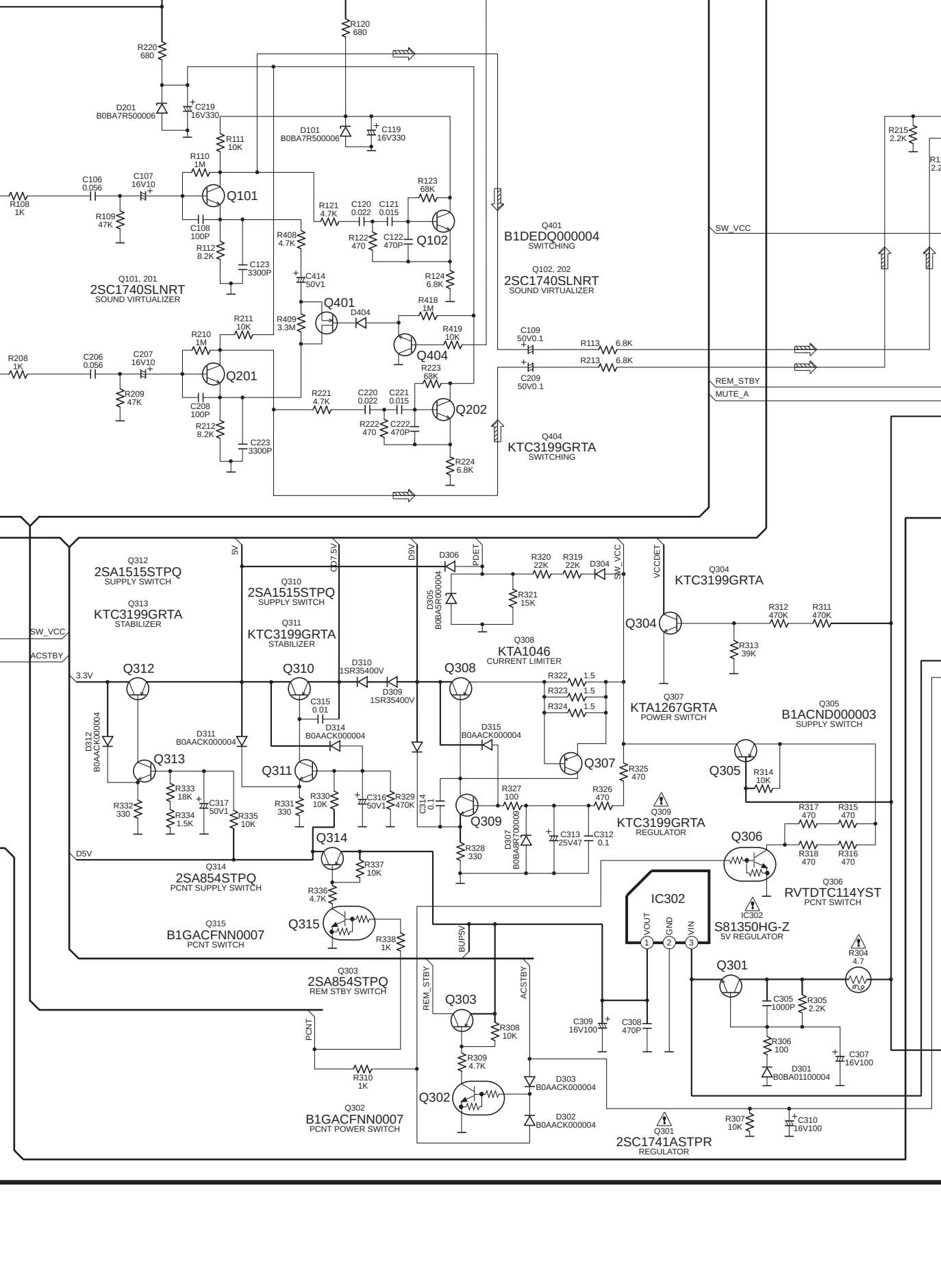
: +B SIGNAL LINE
: MAIN SIGNAL LINE
: CD SIGNAL LINE
: FM/AM SIGNAL LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE




Z801
A2ZZ00000034
LCD
IC801
MN101C38ABB
MICON
Q401
B1DEDQ000004
SWITCHING
Q101
Q102
D201
B0BA7R500006
D101
B0BA7R500006
D802
D803
SV
D9V
SW_VCC


SEG13
SEG14
SEG15
SEG16
SEG17
SEG18
SEG19
SEG20
SEG21
SEG22
SEG23
SEG24
SEG25
SEG26
SEG27
SEG28
CDL
CDR
C851 1000P
C852 1000P
CD L
AGND
CD R
CD3.3V
LDSW/CLDCK
DGND
CD7.5V
TX
PWRGND
MCLK
MDATA
MLD
BLKCK
SQCK
SUBQ
STATUS
RST
REST SW
LOADING
CS801
TO A CD SERVO CIRCUIT (CN702) ON SCHEMATIC DIAGRAM-2
3.3V
CD7.5V
C853 1000P
C850 220P
C849 220P
R890 10K
R889 10K
R888 10K
R887 10K
R886 10K
R893 4.7K
R892 4.7K
R891 4.7K
Q808
B1GCCFGH0002
CD OPEN SWITCH
Q809
RVTDT143XST
CD CLOSE SWITCH
R875 1K
SQCK
R885 4.7K
CD_RESET
R884 4.7K
C868 0.01
Q805, 806, 807
RVTDT143XST
INTERFACING
Q805
Q806
Q807
R876 10K
R877 10K
R878 10K
C854 100P
C855 100P
C856 100P
VREF-
REM_STBY
R883 4.7K
CP802
S780
CD OP/CL SW
R879 10K
R880 4.7K
R881 4.7K
R882 4.7K
OPEN_SW
5V
BLKCK
SUBQ
STAT
REST_SW
IC301
C1BA00000275
POWER IC
R IN
G
L IN
STDBY
FLT
FLT
VCC
L OUT
G
R OUT
C212 2200P
C112 2200P
C303 16V22
C302 16V100
FP301
C213 10V2200
C211 50V1
C111 50V1
Q103, 203
2SD1450RSTA
SWITCH
R215 2.2K
R115 2.2K
Q203
Q103
R302 2.7K
R117 180
R116 220
R216 220
R217 180
C114 16V47
C214 16V47
HEADPHONE
R118 10K
C115 50V3.3
C215 50V3.3


(2A)
A RECR
B RECL
C PBR
D PBL
E GND
F D9V
G GND
H DMT_L
I RECH
J
K BP
L GND
M VREF-
N D5V
O ADL_IN
P PHOTO
Q PL_H
R MOTOR_H
TO B MAIN (DECK) CIRCUIT (2B) ON SCHEMATIC DIAGRAM-7
IC304
LC75342
SOUND PROCESSOR
H SENSOR CIRCUIT
Z861
RCDRPM6937H4
REMOTE SENSOR
E POWER-ON CIRCUIT
D551
B3AGA0000026
STANDBY LED
Q551
B1GACFNN0007
SWITCH
C PANEL CIRCUIT
Z601
RRV12E1240A
AI JOG
RCH
LCH
6 OHM


R120 680
R220 680
D201 B0BA7R500006
C219 16V330
D101 B0BA7R500006
C119 16V330
R111 10K
R110 1M
C106 0.056
C107 16V10
R108 1K
R109 47K
Q101
C108 100P
R112 8.2K
C123 3300P
R123 68K
R121 4.7K
C120 0.022
C121 0.015
R122 470
C122 470P
Q102
R408 4.7K
C414 50V1
R124 6.8K
Q101, 201
2SC1740SLNRT
SOUND VIRTUALIZER
Q401
D404
R418 1M
R409 3.3M
R419 10K
Q404
R210 1M
R211 10K
R208 1K
C206 0.056
C207 16V10
R209 47K
Q201
C208 100P
R212 8.2K
C223 3300P
R223 68K
R221 4.7K
C220 0.022
C221 0.015
R222 470
C222 470P
Q202
R224 6.8K
Q401
B1DEDQ000004
SWITCHING
Q102, 202
2SC1740SLNRT
SOUND VIRTUALIZER
Q404
KTC3199GRTA
SWITCHING
R215 2.2K
SW_VCC
C109 50V0.1
C209 50V0.1
R113 6.8K
R213 6.8K
REM_STBY
MUTE_A
Q312
2SA1515STPQ
SUPPLY SWITCH
Q313
KTC3199GRTA
STABILIZER
Q310
2SA1515STPQ
SUPPLY SWITCH
Q311
KTC3199GRTA
STABILIZER
5V
D7.5V
D9V
D306
PDET
R320 22K
R319 22K
D304
SW_VCC
VCCDET
D305 B0BA5R000004
R321 15K
Q308
KTA1046
CURRENT LIMITER
Q304
KTC3199GRTA
R312 470K
R311 470K
R313 39K
SW_VCC
ACSTBY
3.3V
Q312
Q310
D310 1SR35400V
D309 1SR35400V
Q308
C315 0.01
R322 1.5
R323 1.5
R324 1.5
Q307
KTA1267GRTA
POWER SWITCH
Q305
B1ACND000003
SUPPLY SWITCH
D312 B0AACK000004
D311 B0AACK000004
D314 B0AACK000004
D315 B0AACK000004
Q313
Q311
Q307
R325 470
Q305
R314 10K
R333 18K
C317 50V1
R334 1.5K
R335 10K
R332 330
R331 330
R330 10K
C316 50V1
R329 470K
C314 0.1
R327 100
R326 470
Q309
KTC3199GRTA
REGULATOR
R317 470
R315 470
R318 470
R316 470
D307 B0BA8R700008
C313 25V47
C312 0.1
R328 330
Q306
D5V
Q314
2SA854STPQ
PCNT SUPPLY SWITCH
R337 10K
R336 4.7K
Q315
B1GACFNN0007
PCNT SWITCH
R338 1K
Q306
RVTDTC114YST
PCNT SWITCH
IC302
S81350HG-Z
5V REGULATOR
VOUT
GND
VIN
BUP5V
Q303
2SA854STPQ
REM STBY SWITCH
REM_STBY
ACSTBY
PCNT
Q303
R308 10K
R309 4.7K
Q302
B1GACFNN0007
PCNT POWER SWITCH
R310 1K
D303 B0AACK000004
D302 B0AACK000004
C309 16V100
C308 470P
Q301
R304 4.7
C305 1000P
R305 2.2K
R306 100
C307 16V100
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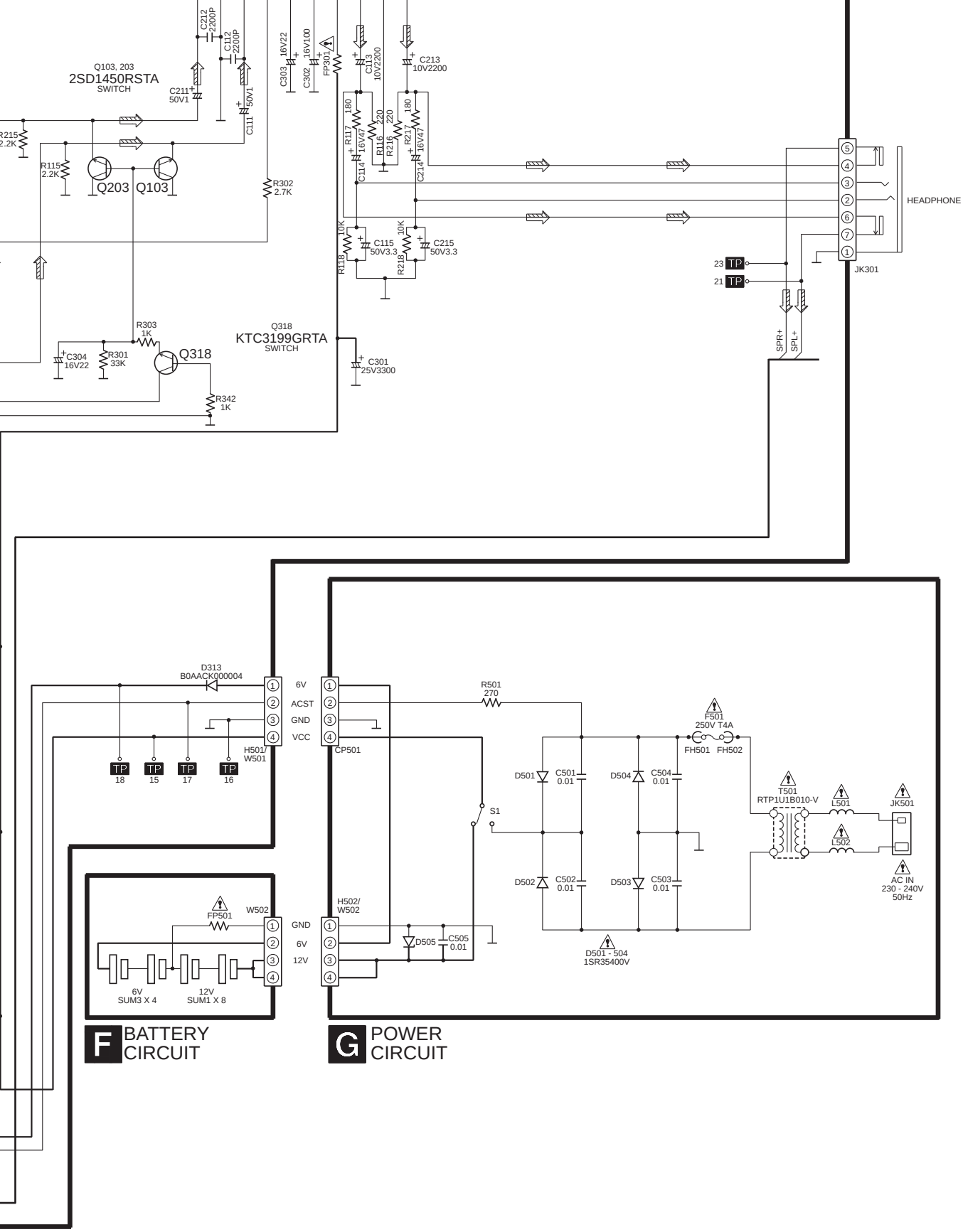
Q301
2SC1741ASTPR
REGULATOR
R307 10K
C310 16V100



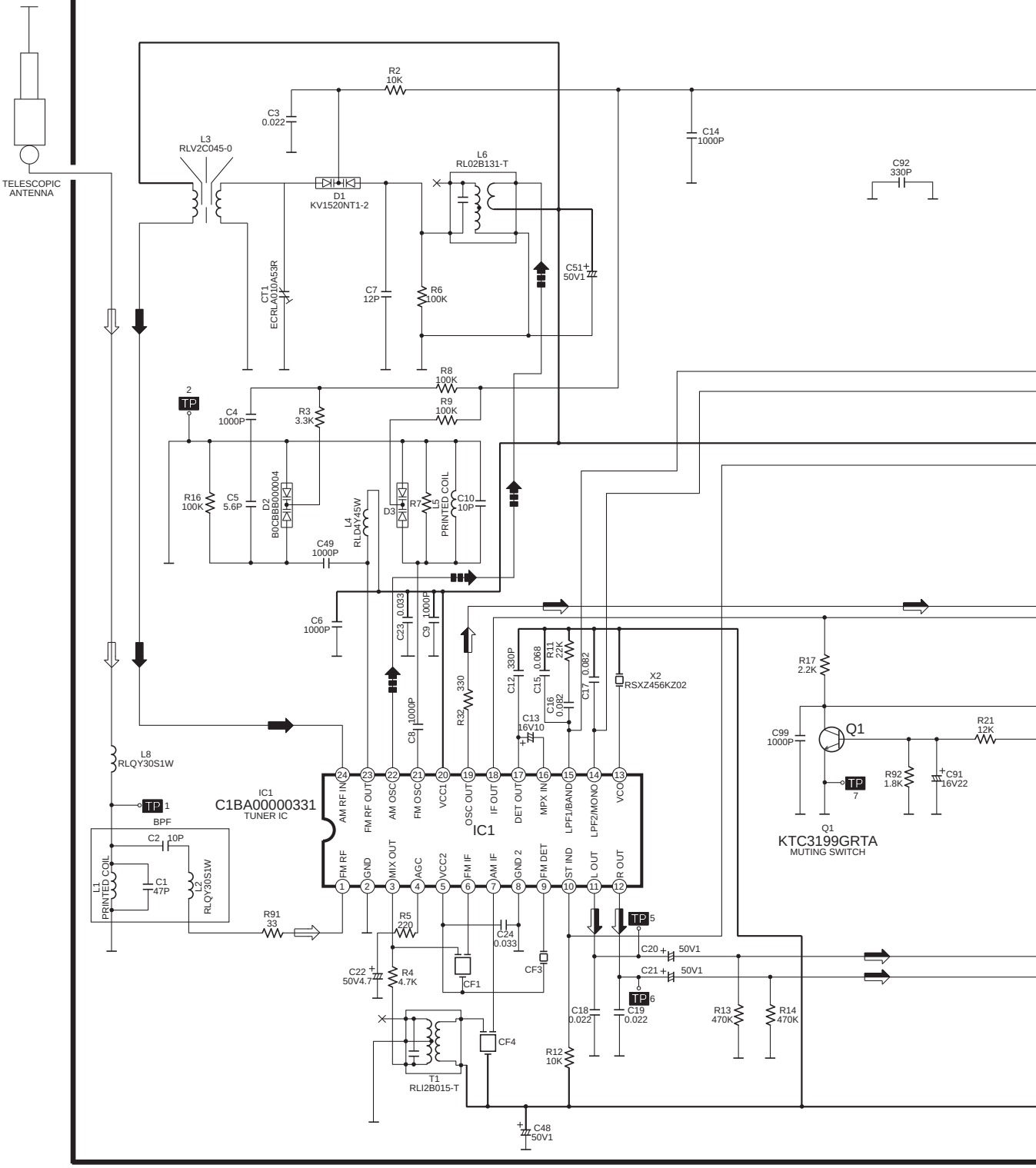
F BATTERY CIRCUIT

G POWER CIRCUIT

SCHEMATIC DIAGRAM - 4

B MAIN (TUNER) CIRCUIT

: FM/AM SIGNAL LINE
: +B SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE
: FM OSC SIGNAL LINE

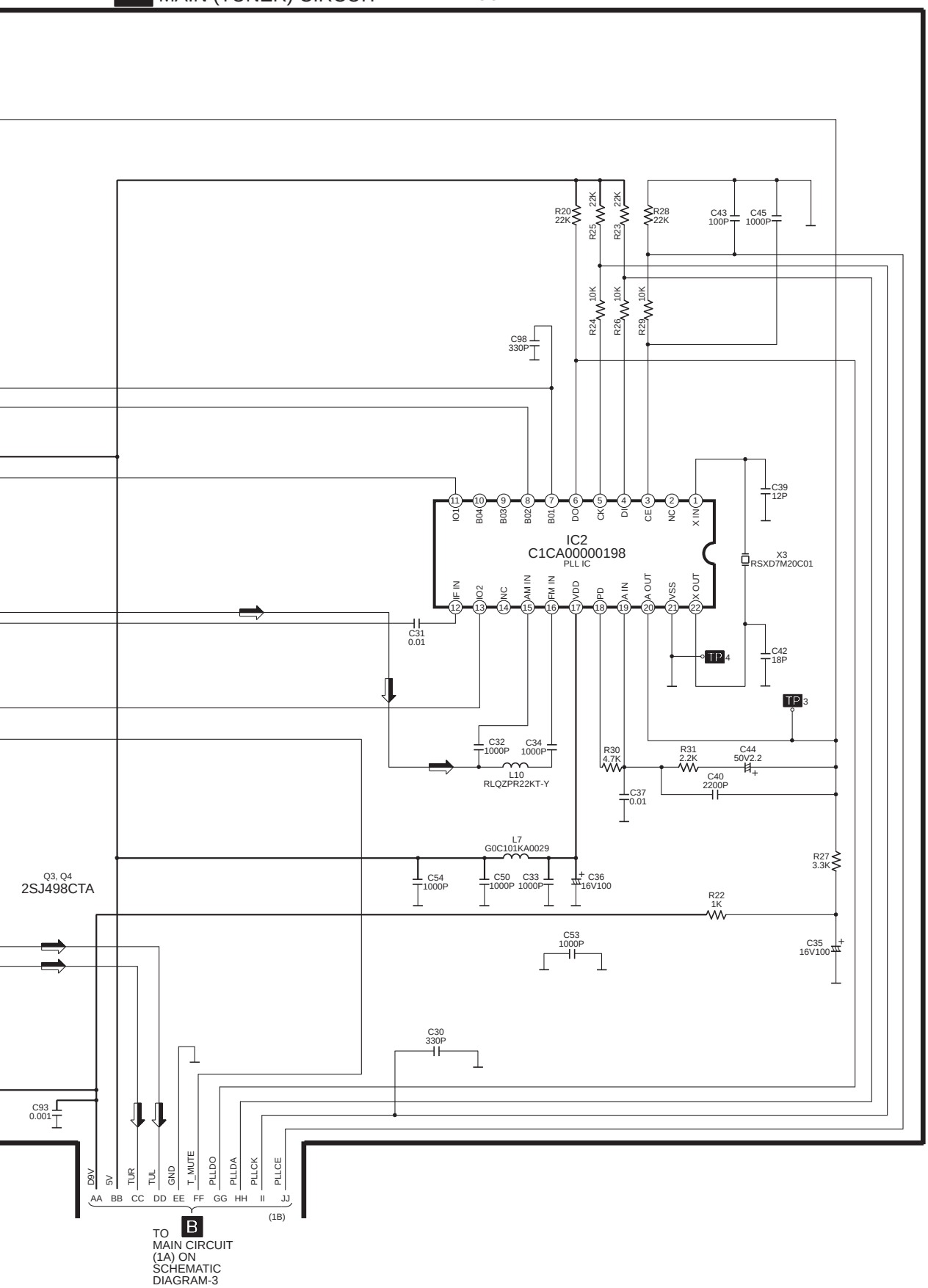


SCHEMATIC DIAGRAM - 5

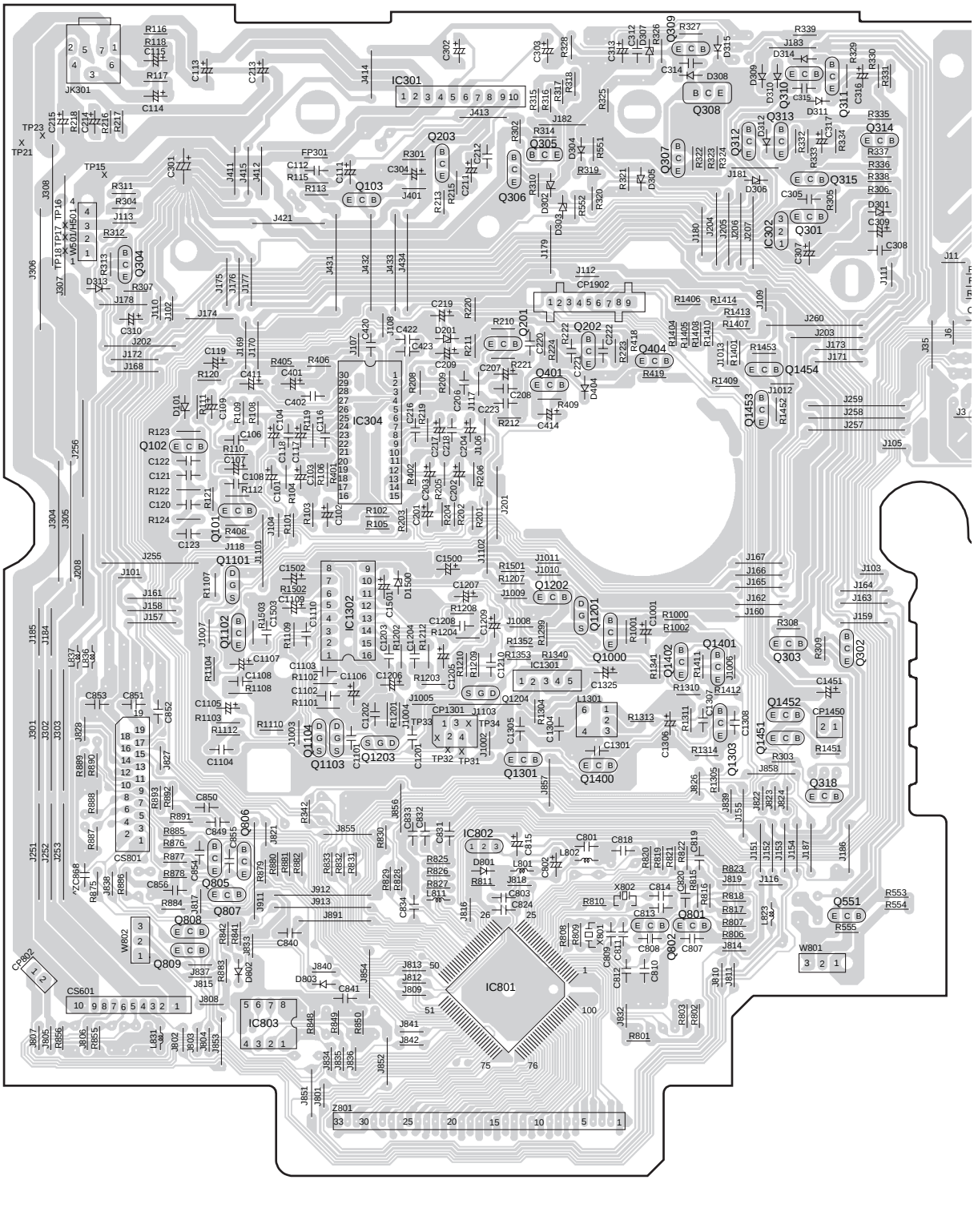
B MAIN (TUNER) CIRCUIT

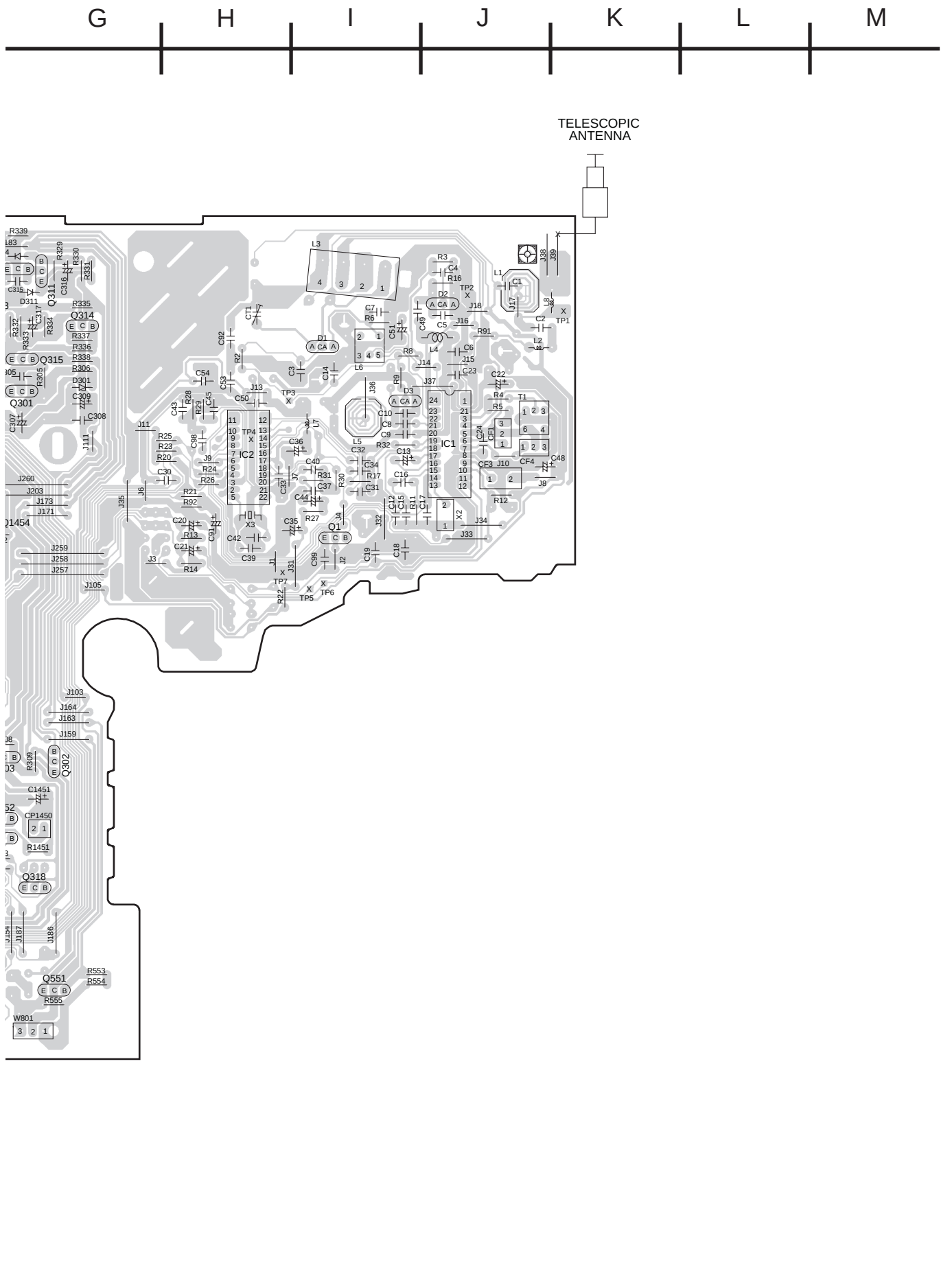
: FM/AM SIGNAL LINE

: +B SIGNAL LINE

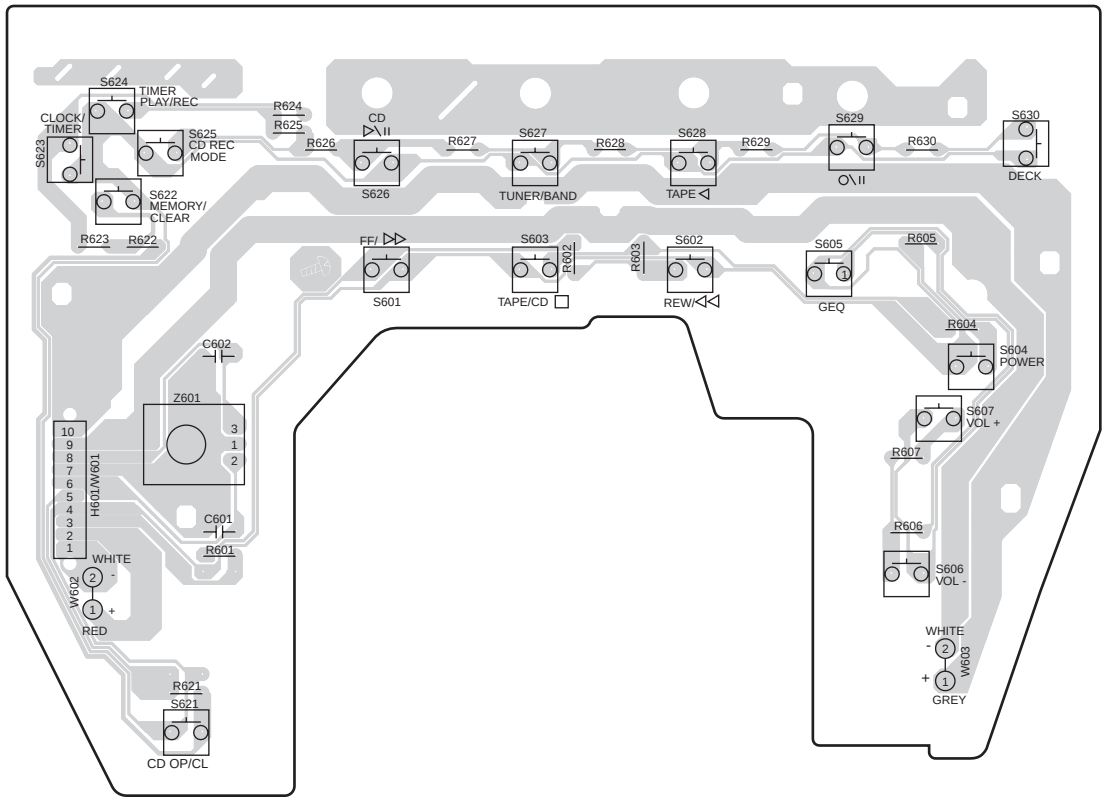


B MAIN P.C.B (REPX0193G)

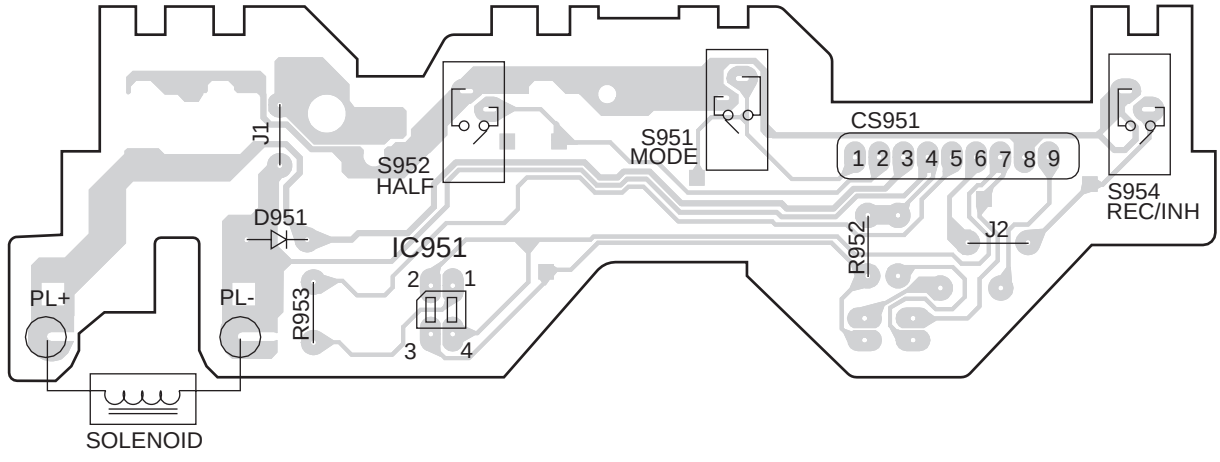



G
H
I
J
K
L
M
TELESCOPIC
ANTENNA

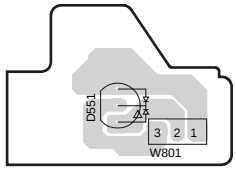
C PANEL P.C.B (REPX0195A)



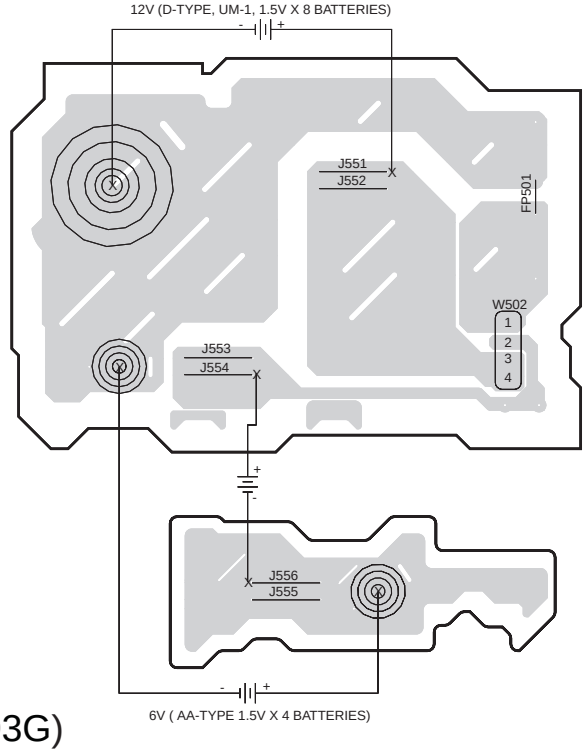
D DECK MECHANISM P.C.B (REPX0108E)



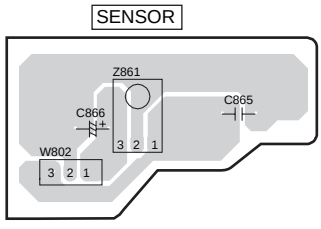
E POWER-ON P.C.B (REPX0193G)



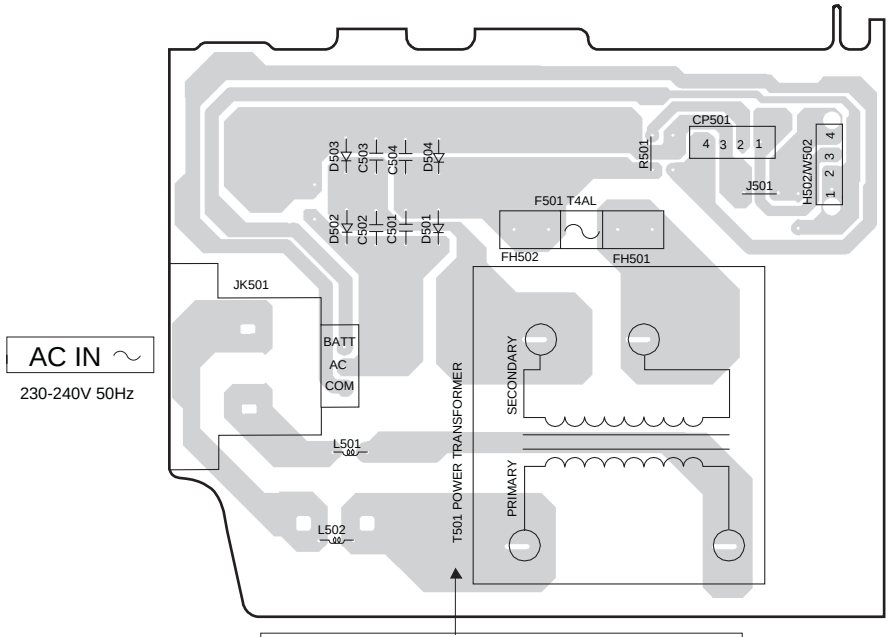
F BATTERY P.C.B (REPX0193G)



H SENSOR P.C.B (REPX0193G)



G POWER P.C.B (REPX0193G)



CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT TOUCH THIS P.C.B